University of Alberta

The Lived Experience of Obese Boys in Structured and Unstructured Physical Activity Settings

by

Corey Allan Oselies ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial
fulfillment of the requirements for the degree of
Master of Arts

Faculty of Physical Education and Recreation

Edmonton, Alberta

Fall 2002

National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-81320-7

Canada

University of Alberta

Library Release Form

Name of Author: Corey Allan Oselies

Title of Thesis: The Lived Experience of Obese Boys in Structured and Unstructured Physical Activity Settings

Degree: Master of Arts

Year This Degree Granted: 2002

Permission is hereby granted to the University of Alberta Library to reproduce single copies of this thesis and lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without the author's prior written permission.

Corey Oselies

September 25, 2002

#214, 10636, 120st.
Edmonton, Alberta
T5H 4L5
(780) 488-7864

University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *The Lived Experience of Obese Boys in Structured and Unstructured Physical Activity Settings* submitted by *Corey Oselies* in partial fulfillment of the requirements for the degree of *Master of Arts.*

Dr. Janice Causgrove Dunn

A. Brian Nielsen
Dr. Brian Neilsen

Dr. Julia Ellis

September 24, 2002

ABSTRACT

This study was conducted to examine the lived experience of obese boys in structured and unstructured physical activity settings. Qualitative research techniques were used to explore obese children's perceptions and experiences during physical education and recess. Factors such as physical competence, severity of obesity, individual circumstances, as well as general personality traits all influenced how these children participated in physical activity. Results from this study indicate that obesity did not necessarily prevent the participants from having positive experiences during recess and physical education class. By demonstrating specific athletic ability, the participants' perceptions of social acceptance was increased, and likely contributed to an overall sense of belongingness and physical competence.

TABLE OF CONTENTS

CHAPTER ONE-p.1

INTRODUCTION-p.1

Delimitations-p.4

Limitations-p.4

Definition of Terms-p.4

CHAPTER TWO-p.6

REVIEW OF LITERATURE-p.6

Social Perceptions of Obesity-p.6

The Need to Belong-p.9

Loneliness and Peer Rejection-p.12

Loneliness and Physical Activity-p.16

Physical Competence-p.17

STATEMENT OF PURPOSE-p.20

CHAPTER THREE-p.24

METHOD-p.24

Participants-p.24

Qualitative Methodology-p.25

Procedures-p.33

Data Analysis-p.36

CHAPTER FOUR-p.39

RESULTS AND DISCUSSION OF INDIVIDUAL INTERVIEWSp.39

PARTICIPANT #1: Wade-p.40
    Individual Characteristics-p.40
    Physical Activity-p.42
    Physical Competence-p.43
    Belongingness-p.47
PARTICIPANT #2: Eric-p.48
    Individual Characteristics-p.48
    Physical Activity-p.50
    Physical Competence-p.53
    Belongingness-p.54
PARTICIPANT #3: Craig-p.57
    Individual Characteristics-p.57
    Physical Activity-p.59
    Physical Competence-p.62
    Belongingness-p.64
PARTICIPANT #4: Grant-p.66
    Individual Characteristics-p.66
    Physical Activity-p.68
    Physical Competence-p.70
    Belongingness-p.73
PARTICIPANT #5: Mark-p.75
    Individual Characteristics-p.76
    Physical Activity-p.78

Physical Competence-p.80

Belongingness-p.82

CHAPTER 5-p.85

GENERAL DISCUSSION OF CHILDREN'S EXPERIENCES-p.85

Belongingness-p.85

Loneliness-p.88

Physical Competence-p.90

CHAPTER 6-p.95

CONCLUSIONS-p.95

REFERENCES-p.99

Appendix A-Interview Checklist-p.110

Appendix B-Parent Interview Schedule-p.111-112

Appendix C-Participant Interview Questions-p.113

Appendix D-Questions About Drawings-p.114

Appendix E-Wade's Good Day At Recess-p.115

Appendix F-Wade's Good Day In Physical Education-p.116

Appendix G-Wade's Bad Day In Physical Education-p.117

Appendix H-Wade's Bad Day At Recess-p.118

Appendix I-Eric's Good Day At Recess-p.119

Appendix J-Eric's Good Day In Physical Education-p.120

Appendix K-Eric's Bad Day In Physical Education-p.121

Appendix L-Eric's Bad Day At Recess-p.122

Appendix M-Craig's Good Day At Recess-p.123

Appendix N-Craig's Good Day In Physical Education-p.124

Appendix O-Craig's Bad Day In Physical Education-p.125

Appendix P-Craig's Bad Day At Recess-p.126

Appendix Q-Grant's Good Day At Recess-p.127

Appendix R-Grant's Good Day In Physical Education-p.128

Appendix S-Grant's Bad Day In Physical Education-p.129

Appendix T-Grant's Bad Day At Recess-p.130

Appendix U-Mark's Good Day At Recess-p.131

Appendix V-Mark's Good Day In Physical Education-p.132

Appendix W-Mark's Bad Day In Physical Education-p.133

Appendix X-Mark's Bad Day At Recess-p.134

LIST OF TABLES

Table-p.125

Participant Information-p.25

CHAPTER 1

Introduction

Humans are fundamentally motivated to pursue social, interpersonal relationships with others on an ongoing basis (Baumeister & Leary, 1995; Ryan & Deci, 2000). Empirical evidence indicates that children who are unpopular or socially rejected by their peers experience a greater degree of loneliness and social dissatisfaction than those who are more socially accepted (Asher, Parkhurst, Hymel & Williams, 1990; Asher & Wheeler, 1985; Galanaki & Kalantzi-Azizi, 1999). A lack of peer acceptance may have social and psychological implications for children, including children with obesity. Although the psychological consequences of childhood obesity (e.g., effects on self-concept, self-esteem) are not fully understood (Mendelson & White, 1982; Wadden Foster, Brownell, & Finley, 1984), rejection by others can promote emotional and behavioral disorders (Baumeister & Leary, 1995).

The idea that people "need to belong" has been well documented in the literature. Bowlby 's (1969) work on attachment theory and Maslow's (1968) hierarchy of needs both clearly refer to the basic human motivation to form interpersonal bonds with other people. Similarly, the belongingness hypothesis by Baumeister and Leary (1995) posits that all humans have a fundamental need to form and maintain quality relationships with other humans. Self-Determination Theory (SDT) includes "relatedness" as one of three innate psychological needs that enhance self-motivation, mental health, and overall well being (Ryan & Deci, 2000). The absence of this sense of belonging or relatedness may negatively affect a person's health, behavior, and psychological well-being (Baumeister & Leary, 1995; Ryan & Deci, 2000).

A number of studies provide evidence that obesity is not looked upon favorably in North American society. For instance, in studies where participants were asked to rank order pictures of people with various impairments based on general "likeability", pictures of a persons with obesity were consistently ranked among the least likeable (Goodman, Richardson, Dornbusch, & Hastorf, 1963; Richardson, Goodman, Hastorf, & Dornbusch, 1961). These studies, and others examining societal perceptions (Maddox, Back, & Liederman, 1968; Miller, 1970), have revealed that people with obesity are devalued in our culture, due to their physical appearance. Research evaluating peoples' perceptions or opinions of children with obesity has shown that obese children are not only devalued, but have been described as "lazy" and personally responsible for their overweight condition (Dejong, 1980; Maddox et al., 1968). Furthermore, a host of research has suggested that obesity is a stigmatizing condition that often invokes criticism, negative feedback, and social exclusion (Allon, 1975; Dejong, 1980; Pierce & Wardle, 1997).

Research has shown that obese children are less physically active than their non-obese peers (Berkowitz, Agras, Korner, Kraemer, & Zeanah, 1985; Marshall & Bouffard, 1997; Thompson, Jarvie, Lahey, & Cureton, 1982). This more sedentary life-style may negatively affect the development of motor skills, decrease physical fitness, and minimize social interaction with peers in physical activity environments (Marshall & Bouffard, 1997). During childhood, increased social status and positive peer relations are often gained by being good at something that other children value (Asher, Oden, & Gottman, 1977). Studies have shown that sports and athleticism are more important than academic achievement in determining personal popularity of late elementary (Grade 4-6) school-boys (Buchanan, Blankenbaker, & Cotten, 1976; Chase & Dummer, 1992). Both physical education class and recess afford children the opportunity to publicly display their physical ability, and may therefore affect a child's social standing and development of positive peer relations.

While poor performance and lack of understanding may be somewhat concealed in academic school subjects, recess and physical education classes provide a public display of movement competence and physical skills. Currently, there is no evidence to suggest that obese children experience physical activity settings differently than any other settings in their day to day lives. However, there is research evidence indicating that children who lack movement competence may withdraw from physical activity due to rejection and ridicule by peers, as well as lack of success and poor self-perceptions in this setting (Bouffard, Watkinson, Thompson, Causgrove Dunn, & Romanow, 1996; Hay & Missiuna, 1998; Skinner & Piek, 2001). The literature has also stated that physical appearance is highly valued in our society, and that people with obesity are often criticized and socially excluded. Thus, one might expect that children who are obese have particularly negative experiences in settings that emphasize physical skill and fitness. Both the physical appearance and potentially poor athletic competence of boys with obesity seem likely to result in an increased risk of peer rejection, social isolation, and feelings of loneliness in physical activity environments, leading to withdrawal from physical activity, exclusion by peers, or both. Either way, the outcome is negative for physical, emotional, and social health, and so it should be explored. Although research has shown that obese children are generally less active, and are less movement competent than their non-obese peers, there is no research that captures how obese children feel in different physical activity settings. The purpose of this study is to examine the lived experience of children with obesity in structured and unstructured physical activity settings.

Delimitations

This research project included males between the ages of 9 and 12 years. According to Piaget (1954), children of six years of age or older are in the third stage of cognitive development (concrete operation thought), meaning that they are able to identify causal relationships and have the ability to understand categories, classification systems, and group hierarchies.

The responsiveness of the participating children is dependent on the quality of the interviewing skills of the researcher. In an attempt to develop these skills, the researcher completed practice interviews with two children during a pilot study.

Limitations

Qualitative research is often directed by the specific participant being interviewed. Questions that are misunderstood or misinterpreted will be answered differently between subjects. The depth and accuracy of responses will be influenced by each child's level of comfort in answering personal, and possibly emotionally stimulating questions. Moreover, it is expected that children's experiences in physical activity contexts will differ with age and grade level. A limitation of this research may be the resulting variability of responses by different children in the sample.

Definitions

a) Relatedness / belongingness / connectedness – A basic fundamental need to feel connected and loved by other people (Kasser & Ryan, 1999). An innate desire to form and maintain stable interpersonal relationships with others (Baumeister & Leary, 1995).

b) Loneliness – Feelings of dissatisfaction with current interpersonal relationships (Papleau & Perlman, 1982).

c) Obesity – Excess of body fat which frequently results in a significant impairment of health (Burton, Foster, Hirsch, & Van Itallie, 1985).

d) Unstructured Physical Activity – Activity where the child has the primary decision-making power and can make multiple decisions regarding participation and behavior (e.g., recess time at school) (Causgrove Dunn & Watkinson, 2000).

e) Structured Physical Activity – Activity where participation decisions are made by someone other than the child, and the child is expected to comply with the requests of the leader (e.g., school physical education class) (Causgrove Dunn & Watkinson, 2000).

CHAPTER 2

Review of Literature

This study is an effort to understand how boys with obesity experience structured and unstructured physical activity settings. Rather than speculating from an outside perspective, the study will record the thoughts and opinions about physical education class and recess of boys who are obese. The general assumption is that physical characteristics determine how people are initially perceived, and consequently treated (Dejong, 1980; Maddox et al., 1968; Richardson et al., 1961). It is hypothesized that children with physical attributes and behaviours (e.g., movement skill performance) that are socially perceived as being negative, have a greater chance of being rejected by their peer group. Furthermore, children who do not feel a sense of belongingness or acceptance at recess or in physical education class may be more likely to avoid, withdraw from, or be excluded from activity environments all together (Goodwin & Watkinson, 2000).

Social Perceptions of Obesity

Ancel Keys (1955) was among the first social scientists who reported on the negativity associated with obesity. Keys argued that obesity is generally seen as an indication of self-indulgence, and that this explains the negative affect associated with the disorder. Society in general has historically stressed the importance of impulse control, starting with the early Christian church, which included gluttony as one of the seven deadly sins (Rand & Macgregor, 1990). The perceived lack of willpower often associated with obesity has often been viewed as a form of gluttony, and it is reported that physicians and the general public continue to find obesity unaesthetic and unsightly

(Keys, 1955; Myers & Rosen, 1999; Rand & Macgregor, 1990; Wright & Whitehead, 1987).

Research has shown that body types (i.e., ectomorph, mesomorph, and endomorph) hold social significance. For example, Lerner and Korn (1972) collected socio-metric data regarding preference of body-builds in 180 males divided into three age groups (ages 5-6 years, 14-15 years, 19-20 years). When shown pictures of each of the three different body types, participants tended to rate the mesomorph (i.e., lean and muscular build) as the most favorable or desirable, while the endomorphic body-build (i.e., chubby and round) was most often chosen as non-preferred and unfavorable. Similarly, Staffieri (1967) found that 6-7 year old children had significantly more favorable perceptions for a mesomorphic build as compared to an endomorphic build. In this latter study, children were asked to choose descriptors from a list and match them to pictures depicting the three body types. Each descriptor was assigned to only one picture, until all had been chosen. The words "lazy", "sloppy", "ugly", "cheats", "dirty" and "gets teased" were used most frequently to describe the endomorph, as compared to the mesomorph and ectomorph. In contrast, "healthy", "clean", "good looking", "smart", and "neat" were chosen least often to describe the endomorph. The descriptors "healthy", "good looking", "strong" and "lots of friends" were selected most frequently to match the mesomorph body type, while descriptors such as "weak", "quiet", "afraid" and "worries" most often described the ectomorph.

Negative social perceptions of obesity are also illustrated in a classic study by Richardson et al. (1961). These researchers asked 10 and 11-year-old children to view a set of six pictures, each of a different child, and rank order them from most liked to least liked. The set included one picture of a child with no apparent physical disability, and five others with obvious physical impairments. The child with no disability was consistently ranked as the "most liked", followed by a child with a leg brace and crutches, a child sitting in a wheelchair, a child with his left hand missing, a child with a facial disfigurement, and finally a child with obesity. Similar patterns of responses emerged when Goodman et al. (1963) replicated the study with adults, children (aged 10-11) from various cultural backgrounds, and children (aged 10-11) with mental and physical impairments. These and other studies (Maddox et al., 1968; Miller, 1970) have found that children with obesity are consistently ranked last, when ranked according to overall likeability or intentions of friendship.

Unfortunately, individuals who are obese may be subject to criticism and social exclusion (Maddox et al., 1968; Pierce & Wardle, 1997). According to Goffman (1963), people who are perceived to possess a social flaw are often considered deviant, and are prone to discrimination and general avoidance by others. People with physical flaws are also often reported to cause others around them to feel uncomfortable and uncertain (Kleck, Ono & Hastorf, 1966; Langer, Taylor, Fiske & Chantowitz, 1976).

In addition to being reported as a physical flaw, obesity has been viewed as a character flaw. People who are overweight are often held personally responsible for their condition. Rodin, Price, Sanchez, and McElliot (1989) asked 80 college students to read one of two fictional scenarios, describing a company's refusal to hire an obese individual over a non-obese individual. In both fictional accounts, the obese individual was said to be slightly more qualified than the non-obese person competing for the same job. In one scenario the person's obesity was reported as being caused by overeating, while in the other scenario the obesity was caused by a hormonal imbalance. When asked to report on how prejudiced the company was in the hiring process, the perceived *controllability* of weight was a significant factor. That is to say, when obesity was described as beyond the candidate's control (hormonal), the company was rated as being more prejudice. When the cause of obesity was perceived as being under the control of the person (overeating), the company was rated as being less prejudiced in not hiring the obese person. Other studies have also extended the notion that the perception of responsibility, or cause of obesity, plays a significant role in others' reactions to the physical stigma of excessive weight (Dejong, 1980; Maddox et al., 1968). Generally, these studies suggest that society often assumes obesity is a disorder that is caused by a lack of exercise or overeating, both of which are believed to be under the control of the person.

The Need to Belong

The general negative attitude toward obesity may have an adverse affect on obese individuals' perceptions of social acceptance. The need to feel accepted by others is defined by Baumeister and Leary (1995), in their belongingness hypothesis. This hypothesis specifically states that:

> Human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships. Satisfying this drive involves two criteria: First, there is a need for frequent, affectively pleasant interactions with a few other people, and, second, these interactions must take place in the context of a temporally stable and enduring framework of affective concern for each other's welfare. Interactions with a constantly changing sequence of partners will be less satisfactory than repeated

> interactions with the same person(s), and relatedness without frequent contact will also be unsatisfactory. A lack of belongingness should constitute severe deprivation and cause a variety of ill effects. (Baumeister & Leary, 1995, p.1)

Baumeister and Leary (1995) proposed that the need to belong has two main features. First, frequent personal interaction and contact must take place with other people. These interactions should be sufficiently positive or pleasant, and free from conflict and negativity. Second, the person must regard the social relationship as having the potential for continuation, affective concern, and stability. An ongoing relationship is considered more rewarding and satisfying than that of a casual acquaintance, or interaction with a stranger. More importantly, each person within the relationship must believe that the other(s) have a true sense of caring or concern for their needs and wants.

The belongingness hypothesis contends that human beings have an innate motivation towards a sense of belongingness, or a feeling of acceptance by others. Although individual differences are expected, it is hypothesized that this drive should be found to some degree in all cultures. An evolutionary basis exists in that social bonds have clear survival and reproductive benefits (Buss, 1991). For example, cooperation within a group has survival benefits such as large-scale hunting for large animals, food gathering, and defense of one's territory and possessions. Groups may also introduce suitable mates and provide a community setting to raise children. The result of this evolutionary foundation gives those who experience belongingness a sense of positive affect, in contrast to the distress or anxiety experienced by those who do not (Baumeister & Leary, 1995).

Self-determination theory also postulates that the need to belong or feel related is a fundamental human need (Ryan & Deci, 2000). Specifically, it is hypothesized that people have an inner drive to seek out potential relationships through increased contact with others. Social contexts that satisfy this need will result in greater intrinsic motivation, satisfaction, and perceptions of well-being. In contrast, social contexts that thwart the fulfillment of this need will decrease intrinsic motivation and cause negative affect. As a fundamental need, a lack of relatedness may also lead to a number of negative behavioral or psychological problems. Effects of the deprivation of belongingness include health problems related to increased stress and lack of social support. Emotional distress, decreased happiness, and problems with social adjustment have also been reported (Baumeister & Leary, 1995).

The belongingness hypothesis proposes that people are motivated to reach certain levels of quality and quantity in their social relationships. Once these levels are achieved, the person's motivation to form new bonds should decrease. For example, people who have quality social bonds with others should feel less satisfaction forming new relationships in comparison to those who are socially deprived (Baumeister & Leary, 1995).

Baumeister and Leary (1995) point out that the need to feel related to others can be linked to other motivations, including achievement, approval and intimacy. Achievement is sought in settings that are valued by others, as opposed to solitary achievements, and being recognized by others essentially validates the effort put into accomplishing one's goals. Similarly, the need for approval is the foundation on which social relationships are based. Approval is not only necessary in forming relationships, but also in maintaining these interpersonal bonds. A sense of acceptance and intimacy are the key elements in successfully maintaining a close interpersonal relationship (Baumeister & Leary, 1995).

Loneliness and Peer Rejection

When a person's belongingness needs are not being sufficiently met, a common result is to feel a sense of loneliness (Baumeister & Leary, 1995; Page, Scanlan & Deringer, 1994). Papleau and Perlman (1982) indicate that loneliness is an unpleasant and distressing experience, which is not necessarily synonymous with objective social isolation (i.e., loneliness is a subjective experience). Loneliness reflects an "individual's subjective perception of deficiencies in his or her social relationships" (Russell, Cutrona, Rose, & Yurko, 1984, p. 1313).

There are some research findings that suggest the quality of social interactions is often more predictive of loneliness than the quantity (i.e., total number of friends) (Larson, 1990). In other words, mere social contact does not buffer people against feelings of loneliness (Baumeister & Leary, 1995). Loneliness can occur in the presence or absence of social relationships, and is not necessarily synonymous with being alone. Therefore, it is possible for a child to have a family and a number of acquaintances, yet still feel lonely. Conversely, a child who does not have many close or intimate relationships with others will not necessarily feel lonely if he or she does not desire more in the way of companionship or belongingness (Page et al., 1994).

In a series of interviews, Hayden, Tarulli, & Hymel (as cited in Asher et al., 1990) asked children in Grades 3 to 8 to define loneliness, and to describe any personal experiences of loneliness or social exclusion. A qualitative analysis of the children's reported personal experiences resulted in the identification of three distinct themes related to loneliness: emotional, cognitive, and specific situations or events that cause loneliness. In regard to emotion, the children expressed a clear awareness of the emotional consequences of loneliness. Children described the term 'loneliness' as being "sad" and "boring", while making references to feeling unneeded or left out. With regards to the cognitive dimension, children most often related loneliness to the lack of important qualities in their social relationships. For example, they mentioned not having a sense of companionship, someone to talk to, or someone to play with. The absence of a sense of acceptance or inclusion into a group, and feeling left out were also frequently reported. Some children also made reference to a lack of loyalty, trust, and self-worth, and an absence of opportunities for nurturance from others. Finally, the third common theme was that these experiences were often associated with several types of traumatic situations or events. Conflict, rejection, broken loyalties, exclusion and being ignored were some of the prevalent themes extracted from the examples children gave about specific occurrences or events that occurred at home and at school.

Some researchers contend that rather than being a unitary or global construct, there are different types loneliness. Weiss (1973) proposed a theoretical distinction between two types of loneliness: social and emotional. Social loneliness is a product of insufficient social relationships, or not feeling like part of a group. In contrast, emotional loneliness refers to the lack of a close, interpersonal attachment with at least one other person. It has been found that although both are forms of loneliness, each is expressed somewhat differently (Asher et al., 1990). Those reporting social loneliness refer to feeling left out, and that they do not belong when in group situations. Emotional loneliness is characterized by an aching emptiness, and people experiencing this type of loneliness tend to say that no one really knows them or cares for them.

Peers, and especially friends, have been shown to be important sources of companionship, recreation, trust and stability (Asher, 1990). A major factor contributing to feelings of loneliness in children is being routinely rejected by peers or playmates (Bullock, 1993). Unpopular children have been identified as either rejected or neglected (Asher, 1990). Rejected children are those who are actively disliked by their peers, and who lack friends in their school classroom. Neglected children are reasonably well liked even though they lack close friends in their class (Asher & Wheeler, 1985). Studies have found that rejected children report greater feelings of loneliness and depression than children of other status groups (Asher & Wheeler, 1985; Parkhurst & Asher, 1992). In a study by Asher and Wheeler (1985), children ranked as "popular" reported the least amount of loneliness, while the neglected, average, and controversial status groups reported similar levels of loneliness and social dissatisfaction. Overall, the data suggests that having few friends and being widely disliked by the peer group (i.e., being rejected) leads to feelings of loneliness and social dissatisfaction in the school context (Asher et al., 1990).

Although it has been observed that rejected children, on average, experience the greatest sense of loneliness among opposing status groups (i.e., neglected, average, controversial), there appears to be considerable variability in individuals' feelings about their social situations. Many rejected children report a strong degree of loneliness, but some do not. Asher et al. (1990) hypothesized several factors that may influence the likelihood of rejected children reporting greater loneliness than others. One factor is the *degree* of rejection one experiences. Specifically, how lonely or socially dissatisfied a child feels is directly associated with how disliked or unpopular he or she is within the school setting. The least lonely rejected child would therefore be one who perceives he or she has some degree of social support (Asher et al., 1990).

A second factor influencing perceived loneliness in rejected children is friendship. A child may be consistently left out of the group, but the involvement in at least one close friendship may counteract the feelings of loneliness (Asher et al., 1990). Research on peer relationships recognizes the distinction between social and emotional loneliness in a child's social environment (Asher & Hymel, 1981). Bukowski and Hoza (1989) proposed that having a close, mutual relationship with a peer (a friend), and being accepted in one's peer group (being popular), have independent effects on a child's feelings of self- worth. This supports the notion that the lack of friendship (emotional loneliness) and the lack of social acceptance (social loneliness) have differing effects of children's feelings of loneliness (Asher et al., 1990).

Other significant factors hypothesized to affect perceived loneliness are the frequency and duration of social rejection (Asher et al., 1990). For example, a child who experiences rejection repeatedly from year to year is more likely to report feelings of loneliness than a child who only experiences peer rejection during a short period. Although the current literature on children is based on assessments taken at single point in time, empirical research with adults has shown that repeated social failure has lead to feelings of loneliness and anxiety regarding one's peer relationships (Frieze, Bar-Tal, & Carol, 1979).

Finally, variability in loneliness among rejected children may also be explained through an examination of children's attributions for social success and failure (Asher et al., 1990). Children defined as unpopular or rejected tend to attribute their social successes to unstable and external causes, and attribute their social failures to internal, stable causes (Goetz & Dweck, 1980). Bukowski and Ferber (as cited in Asher et al., 1990) found that poorly accepted children who blamed themselves for social failure (internal attribution) were lonelier than those children who viewed social failure as being externally caused. Therefore, a child's experience of social rejection, and his or her interpretation or perception of those experiences, may be essential to understanding loneliness in children (Asher et al., 1990).

Loneliness and Physical Activity

There is research suggesting that loneliness is associated with a decrease in physical activity in young people (Page & Tucker, 1992). Page, Frey, Talbert, and Falk (1992) correlated the perceived loneliness ratings and physical fitness scores of 600 children in Grades 1 to 6. The results revealed that children who scored lower on the loneliness rating scale were significantly more active and had better scores on a number of specific physical fitness tests than those who scored higher on the loneliness rating scale (i.e., lonely children). Physical activity often takes place in groups or teams that inevitably contain a social component. The researchers suggested that lonely children may lack the physical and/or social skills necessary to meaningfully interact in group situations. As a result, they may be excluded or withdraw from certain physical activities or games, thus further contributing to reduced physical activity, peer rejection, and poor social interaction.

Page et al. (1992) suggested that another possible explanation for their findings is that being less fit or less physically competent contributes to fewer social interactions, which in turn *results* in feelings of loneliness. Children who lack physical competence may not be included in certain groups or activities, which limits the opportunity to practice social interaction skills. As well, children who lack competency in physical skills may withdraw from activity environments to avoid frustration and embarrassment, again limiting social interaction and perpetuating children's feelings of loneliness and isolation (Causgrove Dunn & Watkinson, 2000; Goodwin & Watkinson, 2000).

Physical Competence

Research has shown that obese children tend to have less positive self-perceptions of physical competence. Braet, Mervielde, and Vandereycken (1997) measured self-perceptions of 92 clinically obese children (i.e., were receiving treatment for obesity at a pediatric outpatient clinic), 47 nonclinically obese children (i.e., obese but not receiving treatment), and 150 non-obese children (all aged 9-12 years) with the Perceived Competence Scale for Children (PCSC; Harter, 1982). The PCSC consists of 28 items that assess perceived competence in the cognitive, physical, and social acceptance domains, as well as perceptions of general self-worth. One-way ANOVAs were used to compare the self-perceptions of children from the three groups (clinical obese, nonobese, nonclinical obese). Results demonstrated that, on average, clinically and nonclinically obese children reported lower self-perceptions of physical competence than their non-obese counterparts.

In North American society, motor or athletic competence is a highly valued quality among school-aged children (Weiss & Duncan, 1992). Research has suggested that a relationship exists between "being good at sport" and popularity or social acceptance (Dunn, 1996; Rose, Larkin, & Berger, 1997). Physically competent children have been shown to have greater social success and peer status than children with low physical ability (Evans & Roberts, 1987). Poor motor skills, decreased enjoyment, and lack of social support are associated with withdrawal from physical activity (Bouffard et al., 1996). Children who do not possess socially acceptable levels of movement competency may be ridiculed by others, excluded, or given roles which provide fewer opportunities to interact with others (Shoemaker & Kalverboer, 1994).

Chase and Dummer (1992) examined children's attitudes toward the role of sports in determining social status. A total of 251 girls and 227 boys in Grades 4, 5, and 6 completed a questionnaire based on questions previously used by Buchanan et al. (1976). The participants were asked to rank four separate criteria ("make good grades," "be good at sports," " be handsome or pretty," or "having lots of money") in the order of importance for determining popularity among peers. Aside from reporting their own personal rankings (personal popularity), participants were also asked to rank the same four criteria from the perspective of a typical male (male popularity) and female (female popularity) of the same age. Chi-square analyses revealed that significantly more boys ($p < .05$) rated sports (rather than grades, appearance, or money) as the most important determinant of 'personal popularity'. Furthermore, Chase and Dummer found that "being good at sports" was the most important criterion for 'male popularity' selected by boys ($p < .001$), and that the girls ranked "being good at sports" as the second most important criterion for determining 'male popularity' ($p < .001$). Similarly, a study by Buchanan et al. (1976) also found that boys ranked "being good at sports" as the most important criterion in determining social status for boys, thus supporting the idea that sport competence is a positive attribute for childhood socialization.

Given that physical competence is an important aspect of child development, the significance of physical education class and recess for children cannot be overemphasized. Recess is typically a social environment, which provides an opportunity for elementary school children to engage in active play with their peers. Recess is a unique part of the day as it is one of the few times children can interact with peers on their own terms, according to their own rules, and with minimal adult interaction (Pellegrini, 1995). In comparison to physical education class, recess provides as much, if not more, opportunities for children to develop fitness and motor skills (Kraft, 1989). The unstructured nature of recess allows children the opportunity to choose a variety of activities, the intensity and duration of participation, and with whom to play with (if anyone at all).

In contrast, physical education class is a more structured physical activity setting from the perspective that an instructor is responsible for choosing the activities to be performed. Physical education class has pre-determined practice schedules, skill progressions, and frequent evaluations of physical competence and fitness levels. Many factors contribute to children's performance levels and overall experience of physical education class. For instance, gender, motor ability, and physical attractiveness have been shown to affect how physical education teachers treat students (Dunbar & O'Sullivan, 1986; Portman, 1995). Based on field observations and qualitative interviews, Portman (1995) found that all 13 of her Grade 6, low-skilled study participants exhibited signs of learned helplessness, expressing a belief that skill failure was inevitable in physical education class. Specifically, the knowledge that they lacked skill compared to others in class, combined with a lack of assistance and meaningful feedback from the teacher, led the students to believe that success was unattainable. When some level of success was attained, it was attributed to some other cause than effort, while failure was largely attributed to lack of ability (Portman, 1995).

Research has shown that obese children are generally less physically active, less movement competent (Marshall & Bouffard, 1997), and have less positive perceptions of physical competence than their non-obese peers (Braet et al., 1997). The overall importance of physical competence in physical education class and recess, combined with the significant differences in the attributes or structures of different activity contexts, suggests that researchers should look more closely at children with obesity in specific activity settings.

Statement of Purpose

The purpose of this study was to examine the lived experience of children with obesity in physical activity settings. More specifically, this study explored how children with obesity felt during physical education class (structured) and recess (unstructured). Both settings provide the opportunity for social interaction and typically afford many different forms of physical activity. In addition, both settings were hypothesized to generate some feelings of exclusion or isolation for obese children, due to societal perceptions of obesity and poor movement competence. However, the differences in the qualities of physical education class compared to recess made it important to examine how obese children experience each setting. For example, obese children may perceive themselves as being less connected to their peers or express more loneliness during recess than physical education, due to the unstructured nature of the activities and the absence of a teacher during recess. This situation may allow other children to tease and exclude a child with obesity, whereas the structured activities and presence of an instructor in physical education class may have a positive impact on their feelings of belongingness and social acceptance. However, other factors may also influence obese children's experiences in physical activity, such as physical competence. Recess may be seen as a more favorable than physical education because children are free to choose to participate in activities they are competent at during recess, while avoiding those they are not good at. The fact that a child is obese does not automatically mean that he or she cannot perform the physical skills needed to effectively participate in at least some team games or sports. An obese child may be less likely to possess explosive speed or physical endurance, but may make meaningful contributions by demonstrating precision, strategy, and strength. An obese child who demonstrates these attributes may be socially accepted and praised for his/her athletic prowess, which would likely contribute to the child's overall sense of belongingness and perceptions of competence. This implies that an obese child's sense of belongingness and competence may be situation specific, especially in the domain of physical activity.

The degree or severity of obesity may also differentially affect children's experiences in physical activity. For example, a child may be clinically defined as obese, but not have enough adiposity to hinder physical performance. A child with a lower level of obesity could presumably participate in physical activity settings at a higher level (relative to more obese children), receive increased social acceptance, and therefore not experience feelings of rejection or loneliness. Essentially, a negative relationship may exist between adiposity levels and social acceptance in physical activity settings. As the degree of obesity increases, physical competence will decrease, resulting in a greater likelihood of peer rejection and feelings of loneliness.

Although relationships between obesity, physical competence, and loneliness seem apparent, the links may not be completely linear. The fact that all children perceive their personal situations differently and have different social and psychological needs, leaves many questions unanswered. The research on the relationship between obesity and physical activity thus far has not provided a description of what is and is not important to obese children during recess and physical education class. It was believed that emergent themes, behaviors, and attitudes could be identified from various methods of data collection. Any commonalties among the reported experiences could then provide greater understanding of participants' general perceptions of physical activity, as well as factors that differentially influence and shape those perceptions. It was also felt that the results might reveal particular activities and practices that are more facilitative to participation, and others that are conducive to isolation and withdrawal.

Although there is an abundance of literature reporting the psychological consequences of obesity (e.g., Braet et al., 1997; Kimm, Sweeney, Janosky, & MacMillan, 1991; Pierce & Wardle, 1997; Strauss, Smith, Frame, & Forehand, 1985), relatively little information can be found in regard to the experiences, perceptions, and affect of children with physical limitations in activity settings (Blinde & McCallister, 1998; Graham, 1995). By including the expressions of those with physical impairments into ongoing research, researchers may gain a better understanding of the meaningful barriers faced, in this case by children who are obese (Reid, 1989). Understanding the emotions, frustrations, and experiences of children who are obese in our society is a fundamental step in the treatment of obesity. This study attempted to discover the worlds of recess and physical education class through the eyes of obese children.

CHAPTER 3

Method

Participants

Participants in this study were 5 boys between the ages of 9 and 12 years. They were recruited from a larger group of participants in a project recently completed by Geoff Ball, as part of the requirements for a PhD at the University of Alberta. During this previous study, the participants were classified as obese using the age and sex-specific sum of five skinfold measures. All participants in the present study had obtained a sum equivalent to > 85th percentile for their age and sex (triceps, biceps, subscapular, suprailiac, and medial calf). To confirm their eligibility for the present study, Body Mass Index (BMI) was calculated for each participant to ensure they were still considered obese. This index is positively correlated with percent body fat ($r = 0.80$). A BMI score between 25 and 30 is classified as moderately obese, between 30 to 40 is classified as massively obese, and greater than 40 is classified as morbidly obese (Brooks, Fahey, & White, 1996). In addition, a visual rating (e.g., 1 = *thin, anorexic-like*; 2 = *ideal, optimal weight to height*; 3 = *overweight, pleasantly plump but not indicative of a health risk*; 4 = *obese, grossly overweight, proposes a health risk*) was also employed to confirm the obesity of the participants (Marshall et al., 1990). The BMI score and visual rating for each participant are shown in Table 1, along with height, weight, and age. Note that pseudonyms are used for each participant, to ensure participant anonymity and the confidentiality of the results of this study.

Table 1. Participant Information

Participant	**Age (years)**	**Height (inches)**	**Weight (pounds)**	**BMI**	**Visual Rating**
Wade	*9*	*55.5*	*135*	*30.8*	*4*
Eric	*10*	*54*	*125*	*30.1*	*4*
Craig	*11*	*59*	*154*	*31.1*	*4*
Grant	*12*	*63*	*185*	*32.8*	*4*
Mark	*11*	*53.5*	*130*	*31.9*	*4*

Qualitative Methodology

This study used qualitative research techniques to explore obese children's perceptions and experiences in structured and unstructured physical activity settings. Qualitative research is a form of inquiry that helps to provide and explain the meaning of social phenomena (Merriam, 1998). Merriam (1988) states that qualitative research involves an "intensive, holistic description and analysis of a single entity, phenomenon, or social unit" (p. 16). Denzin and Lincoln (1994) have posited a basic definition of qualitative research:

> Qualitative research is multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials.…that describe routine and problematic moments and meanings in individuals' lives. Accordingly, qualitative researchers deploy a wide range of interconnected methods, hoping always to get a better fix in the subject matter at hand. (Denzin & Lincoln, 1994, p. 2)

Although qualitative research studies may vary in methodology, terms, assumptions, and procedures, there are certain traits that, to a certain degree, underlie all forms of qualitative research (Bogdan & Biklen, 1992; Merriam, 1998). First, qualitative researchers are interested in "meaning", or how individuals make sense of their lives and the events within it. Understanding the phenomenon of interest from the participant's point of view is often referred to as the *emic*, or insider's perspective. Second, to obtain this information, the researcher is seen as the primary instrument for data collection and analysis. Although data may be collected through questionnaires, interviews, or observations, the researcher is responsive to each individual participant and can adapt techniques or be sensitive to each separate circumstance. The researcher is seen as a *bricoleur*, or someone who is capable of performing whatever needs to be done to gather data. Depending on the setting, the phenomena being studied, and the questions asked, the bricoleur chooses different strategies, methods, or research tools to gather information. The result of the bricoleur's finished work is a *bricolage*, which represents the researcher's understandings and interpretations of the topic of study (Denzin & Lincoln, 1994).

A third characteristic of qualitative research is that it usually involves fieldwork, or the researcher physically going wherever necessary to collect data. In studying a particular phenomena or group of people, it is useful to observe behaviour and gather information in its natural setting. This provides a truer (i.e., more valid) picture of the phenomena of interest, in part because it eliminates the anxiety often brought about by interviewing or observing behavior in an unfamiliar environment (Merriam, 1998).

Fourth, qualitative researchers tend to use an inductive research strategy. Rather than testing an existing theory, a qualitative researcher attempts to build towards a theory from the themes, concepts, and hypothesis derived from the collected data. Like a funnel, qualitative research is open at the beginning (at the top) and becomes more directed and specific as it progresses towards the bottom. The overall picture that is built takes shape as the researcher collects and examines each part of the study (Bogdan & Biklen, 1992; Merriam, 1998).

Fifth, the product of qualitative research is very descriptive. Words and pictures (rather than numbers) from interview transcripts, drawings, field notes, and observations are used to illustrate what the researcher has uncovered about a certain phenomena. Rather than trying to reduce the pages and pages of transcripts and notes into numerical symbols, qualitative researchers try to analyze their data with all of the richness and form in which it was originally recorded (Bogdan & Biklen, 1992; Merriam, 1998).

As suggested by Bierman (1983), drawings were used in this project to indirectly gather information about the experiences of the participants in structured and unstructured physical activity settings. Drawing has been recognized as one of the most meaningful ways for children to express themselves. Children's drawings are thought to reflect their inner worlds, and are linked to the expression of personality and emotions (Malchiodi, 1998). Apart from being used as a diagnostic evaluation tool or means of obtaining psychological data, drawing or art expression can be extremely effective as a modality for allowing children to relate their personal life experiences. Through drawing, a child is able to express fears, concerns, and perceptions, and articulate feelings that are often difficult to verbalize (Chandler & Johnson, 1991; Silver, 2001). Researchers can use children's artwork to supplement, or support other material, such as behavioral observations or interview transcripts (Malchiodi, 1998).

Cummings (1986) reviewed the projective drawing literature and suggested that children's drawings can function as a means to generate hypotheses, and serve as a springboard for further evaluation. Children's drawings have the potential to provide a narrative account, both through what is present in the image itself, and through the children's own response or interpretation to their images. A narrative is a story or a recounting of past events, or a history, statement, report, account, description or chronicle (Malchiodi, 1998). With regard to children's drawing as narratives, Malchiodi (1998) writes:

> Using narrative approaches with children may rely largely on verbal storytelling to allow the child to share information about the content of his or her drawings, and with most children, this is helpful and necessary feedback about the meaning of their art expressions. (p. 44)

Malchiodi (1998) goes on to suggest that "drawings themselves not only allow children's narratives to emerge naturally, but permit the therapist to use these visual narratives as a way to interact with his or her child clients and can serve as a catalyst for children to communicate thoughts and concerns" (p.44). Simply asking a child questions about what he or she has created gives insight into the child's way of thinking and helps to decrease any misinterpretation. However, the types of questions asked have a profound affect on how children will describe what they have drawn. Since children often have a difficult time explaining why they did something, questioning "why" certain images or people were drawn in a particular way does not usually elicit a well thought out answer (Malchiodi, 1998). Instead, researchers can describe what they see or think out loud to prompt children to speak about the contents of their drawings. For example, "I see a bunch of kids playing in a field," or "I see a big wooden playground". Children often add or describe what is happening in the picture, especially if the researcher missed an obvious or important feature of the picture. Questions that imply "not knowing" are effective in generating a productive conversation with a child (Malchiodi, 1998), and were therefore used in the present study.

Although many children need little prompting or encouragement, there may be various reasons why others are resistant or reluctant to draw when asked. Some children may feel insecure about the situation, or lack confidence in how or where to begin. In this scenario, providing a starting point (i.e., "Draw what your gymnasium looks like") or showing other children's drawings may be helpful. Although some children are likely to copy others drawings, they usually begin to put in their own images or personalize it in some way (Malchiodi, 1998).

A second method of data collection used in this study was individual interviews with participants. Recent advances in developmental research have shown that interviews are an accurate and reliable source of information regarding childhood experience (La Greca, 1990). When interviewing children, many developmental factors must be taken into consideration. Both cognitive and social cognitive skills must be sufficiently developed for children to understand themselves and others in their environment (Stone & Lemanek, 1990). Specifically, the accuracy of self-reports depends on the child's concept of self, perceptions of others, understanding of emotion, and basic language skills (Stone & Lemanek, 1990). The literature suggests that children who are 7 - 8 years of age are able to report on their thoughts and emotions, have well-established language and communication skills, are able to understand the perspective of others, and can describe "why" others act a certain way (Stone & Lemanek, 1990).

The use of interviews as a data collection tool requires careful consideration and planning. It is difficult to predict how a child will react or respond to the initial stages of an interview. Some interviewees might be eager to initiate conversation and feel completely at ease, while others may be fearful or hesitant and need some encouragement to feel comfortable. Thus, time must be spent building rapport, to increase the comfort levels of both the interviewer and child, and generally set a positive tone for the entire assessment process (Boggs & Eyberg, 1990). The initial attempts at building a relationship help to relax the child, and allow the researcher to communicate genuine interest in what the child has to say (Rubin & Rubin, 1995). It is not surprising that rapport or familiarity with the child prior to the actual interview has been found to increase the amount and quality of responses obtained (Merrell, 1994).

Whether rapport, cooperation, and trust are established with a child, depends largely upon the communication skills of the interviewer. Boggs and Eyberg (1990) described seven communication techniques to facilitate rapport and obtain quality information from children. These include the use of acknowledgements, descriptive statements, reflective statements, praise statements, questions, commands, and summary statements (See Appendix A). There is no specific sequence or order in which these communication techniques are to be employed. Each child may act and respond differently to each question, so as an interviewer, it is important to be familiar with all of these techniques and to use them flexibly and appropriately throughout the interview.

Once a certain level of rapport is established, the interviewer should continue to consider the anxiety experienced by a child throughout the interview. Silence caused by allowing too much time between questions, and between the asking and answering of questions is a common source of anxiety for children during interviews, and should be avoided (Boggs & Eyberg, 1990). Anxiety may also be created simply by the fact that the child is placed in the subordinate position of being judged by an adult (Ginsburg, 1997). Critical statements that communicate disapproval of the child or the child's behavior should be avoided (Boggs & Eyberg, 1990). To prevent or counter feelings of anxiety, additional suggestions were provided by Ginsburg (1997). Specifically, the interviewer should attempt to empathize, or understand how a child might be feeling about the interview. It should not be assumed that participants see interviews as enjoyable or non-threatening. The interviewer should remain alert for signs of anxiety and behave in a warm and supportive manner. In addition, the initial description of the purpose of the interview should not focus completely on evaluation. A child should be informed about what the interview entails, and that the interviewer was interested in more than just getting a bunch of facts. The interviewer should also show respect and interest in what the child is saying, to help the child to relax and enhance his or her motivation to respond (Ginsburg, 1997).

Before beginning an interview, a protocol of the entire interview process, including all of the questions that were going to be asked, is prepared. However, the interviews were not limited to these questions alone. Children (and adults) respond and react differently to questions due to their different experiences, comprehension levels, and social skills. The interviewer must be aware of the basic techniques involved in the interview process, but must also be prepared to adapt to the particular demands of each individual session. Stated differently, the researcher establishes guidelines, but must also be flexible throughout the interview. Flexible questioning and building on previous answers is often the greatest source of meaningful data when interviewing children (Ginsberg, 1997).

Leading questions should be avoided, however. A leading question is one that influences the direction of the response, and may affect the accuracy of the information received from the child (Seidman, 1991). The wording of a question, as well as tone of voice, may affect the way a child responds. For example, asking, "Are you sure that is what you meant to say?" may cause the child to become defensive, or want to change his or her answer because the statement implies he or she said something wrong. Instead of asking, "Your parents made you play little league baseball, didn't they?" it could be asked, "What were some of the main reasons you decided to join the little league baseball team?" Leading questions often cause anxiety in the child and decrease the reliability of information collected (Seidman, 1991).

In contrast, the use of open-ended questions establish the topic to be discussed while allowing the child to discuss what he or she feels is relevant or important (Seidman, 1991; Wankel & Kriesel, 1985). Additional guidelines provided by Seidman (1991) to add to the quality and effectiveness of the interviews include the following:

1. Listen more and talk less throughout the interview. The interview should be viewed as an opportunity for the interviewee to reveal and express what is important to them.

2. Listen to what the participant is saying, but also try to hear what he or she is implying, and adapt the questions accordingly. Follow up on what the participant says by asking for further examples or specific details.

3. If it is difficult to understand what the person has said, it is the responsibility of the interviewer to ask for clarification. Since the interview is a cumulative process, having misunderstood something early on in the interview may lead to repetitiveness and confusion later on.

4. Avoid interrupting participants when they are in the middle of answering a question. Keep a mental note or write down points that can returned to after that person has finished speaking.

5. It is acceptable for the interviewer to sway from the prepared questions and trust his or her instincts. An interviewee's body language or tone of voice is often not consistent with what he or she is saying. Following up on hunches and asking appropriate questions may help the interviewer get a completely different picture of the participant's experience (Seidman, 1991).

Procedures

For each participant, data were collected on two separate occasions. The first occasion included (1) completion of the drawing task by the participant, (2) a semi-structured interview with one or both parents, and (3) a semi-structured interview with the participant. Replication or similarity of findings across different methods (triangulation) minimizes the possibility that the findings may be the result of particular measurement biases (Silverman, 1997). The second occasion was comprised of a second, follow-up interview with each participant. In order for the participants to feel more at ease and comfortable with the process, all interviews took place individually at their own homes. This helped to reduce the possible distractions and uneasiness associated with a novel environment, which may have affected the quality of answers received. Having already met all of the participants and their parents as a volunteer in the previous study, I had already established a degree of familiarity and rapport.

During the first data collection occasion, each participant was asked to complete a drawing task in a room unoccupied by other people in the house. A brief explanation of the task was provided:

> "Today I am going to ask that you draw four separate pictures. Two pictures will be of gym class, and two will be of recess. What I would like you to do is to draw what you think is a good day at recess and in gym class, and what you think is a bad day at recess and gym class. You can choose which order you wish to draw each of the pictures".

The differences between physical education class (structured physical activity) and recess (unstructured physical activity) were discussed with the child to avoid any confusion. The materials provided were four sheets of white paper (8.5 by 11 inches) and a variety of implements to draw with (i.e., a pencil and several colored pencil crayons). The drawings were collected and later used as a topic of conversation during the interview phase of the data collection.

The first meeting also included an interview with the child's parent(s), while the child was completing the drawing task in a separate room. The pre-determined set of questions shown in Appendix B helped to provide a holistic description of the child to supplement the information gathered from each child.

Following completion of the drawing and the parent interview, participants were interviewed about their perceptions, experiences and feelings during recess and physical education settings. Open-ended questions attempted to evoke a variety of memories, feelings, and preoccupations of the participants being studied. Initial questions were based on those developed by Ellis (1998), which tapped into general preoccupations and motivations of each participant. More specific questions regarding structured and unstructured physical activity settings were also included by the researcher to gain further insight into the specific topic of the thesis. The list of questions is shown in Appendix C. Questioning began after a brief explanation of the interviewing process, which informed the child that he did not have to answer anything he did not want to, and that the interview would end whenever he wanted.

Whenever a child appeared uncomfortable or anxious talking about personal experiences, an indirect form of questioning was attempted. By using hypothetical situations involving hypothetical participants, the child was able to respond as if he were speaking of another person. This allowed the participants to be less self-conscious or anxious, and to report on how “others” would feel in certain situations. Toward the end of the second interview, personal questions were used in an attempt to gather information on behaviors or incidents that are directly related to personal experiences of the participants. As this type of questioning provoked anxiety within the participants, questions were gauged at the discretion of the researcher. When a participant reacted in a way that seemed to reflect feelings of embarrassment or reluctance to answer, the nature of the questioning was immediately changed.

The data from the first interview with each child was transcribed and reviewed to evaluate the effectiveness and shortcomings of the initial interview. A brief analysis or overview of the first interview allowed for exposure of topics that could be expanded upon in the follow-up interview. The second interview was used as both an opportunity to ask previously formulated questions that were missed, as well as ask new follow-up questions regarding the participants' drawings. Malchiodi (1998) suggested a number of questions that researchers might ask a child at the completion of a drawing. See Appendix D for the list of questions prepared for this study, based on those proposed by Malchiodi. In turn, the information gathered about the child's drawing was used as a starting point or catalyst for further open-ended questions.

All interviews were recorded using an audio tape recorder. A cassette recorder and labeled 90-minute tape was used for each interview. However, notes were also taken. The taking of brief notes during the interview forces a researcher to hear and write down the main points, provides a back up in case of a technological mishap, and enables the interviewer to record possible questions that may be used at a later date. Key points were also recorded immediately after the interview, to capturing the mood or essence of what had been said, and as a supplement to the audio-recordings (Rubin & Rubin, 1995).

Data Analysis

Results from the three methods of data collection (semi-structured interviews with parents, semi-structured interviews with participant children, and participant drawings) were analyzed together for each child individually. In order to understand the uniqueness of each child, narrative inquiry was chosen to interpret the information gathered. Narrative inquiry attempts to elicit personal stories, and seeks to understand individuals' lives as examples of larger social phenomena. It is these stories that allow researchers to look past initial interpretations or "misreadings", and give the opportunity to develop a deeper understanding of each participant (Ellis, 1998).

The analysis involved coding the transcripts of the parent interviews and both child interviews into logical themes and categories. Clustering the stories or statements according to recurring topics or interests allows the researcher to recognize predisposition's, feelings, concerns, experiences, and helps to find ways to make sense of situations that reoccur in the children's answers (Ellis, 1998). In addition, the series of open- ended questions and parental interviews provided the researcher with information regarding the overall likes, dislikes, fears and competencies of each participant. This supplemental data allowed for a more holistic view of each child, as well as insight into his experience within the physical activity domain.

Ellis (1998) states that examination of the clusters at a thematic level, rather than a topical level, helps to reveal a child's dominant characteristics, motivations, interests and preoccupations. The purpose of this type of analysis is not only to acknowledge each child as a unique personality, but to organize an understanding of how each child experiences different physical activity settings. With any data collection technique, a concern is that a child may give different responses on different occasions. Although a reasonable and probable concern, Ellis (1998) suggests that if a child has a major preoccupation, it will most likely manifest itself during the course of the interview. Ellis (1998) specifically points out that "a child's answer to any one question will not determine the interviewer's interpretation of that child; rather, the interviewer will consider the collection of stories and the connections among them to arrive at a more complete sense of the child as a whole person" (p. 38).

CHAPTER 4

Results and Discussion of Individual Interviews

The rationale for this study arose from a combination of the lack of qualitative research regarding the perceptions and reactions of late elementary school boys with obesity in physical activity, and the author's personal experience with childhood obesity. The significance of obesity on children's health and emotional development has certainly warranted further research on this ever-increasing problem. By conducting interviews with parents and children, and by having each child participant complete a drawing task, a well rounded, holistic view of each child was obtained. Interviews contained questions regarding experiences in different physical activity settings, general likes and dislikes, feelings, triumphs, and overall inquiries into what made each child a unique individual.

Topics and experiences are presented for each participant and organized according to four clusters of information, along with interpretations and discussion. The four clusters of information were identified after the interviews were transcribed and read a number of times. They literally presented themselves as the majority of the conversations within the interviews seemed to revolve around these four subjects. The first cluster, labeled "Individual Characteristics", contains general information about the child, and serves the purpose of allowing the readers to forge a basic idea of that child in their mind. The second cluster "Physical Activity", discusses the games or sports each child currently participates in, and overall perceptions of structured and unstructured physical activity. Thirdly, "Physical Competence" outlines each participant's current level of physical ability, as well as the sports or activities he does or does not feel competent participating in. Lastly, issues and personal perceptions surrounding "Belongingness" in physical activity settings close out the discussion of each child. Included within these topics are the themes of obesity, instances of social and physical success, failure, individual personality traits and experiences.

Participant #1: Wade

Individual Characteristics. Wade, a nine-year-old child, was the first participant interviewed in this study. Although hesitant and shy at first, Wade soon became comfortable with being interviewed and seemed to enjoy the opportunity to share his experiences with someone new. Having completed the parental interview first, I gained some key insights into Wade's personality, social skills, habits, and way of thinking. As an only child, Wade divides his social time between friends at school and his two parents. Not living close to any school friends has limited the amount of time with peers, but has allowed Wade time to pursue other individual interests. When asked if Wade was ever the one to initiate activities with friends, his parents responded:

Mother:	*Probably the real answer is no. If they phone he is usually willing to go, but he usually spends time on his computer.*
Father:	*He manages to entertain himself, he doesn't need the outside stimulus. It is not always videogames and that either. He will go into his room and organize his hockey cards for an hour and a half or two hours.*

A prominent and interesting part of Wade's character that was mentioned several times by both Wade and his parents was his fear of being injured while engaging in physical activity.

Father:	*He's pretty cautious, especially in physically challenging things. He got one of those GT Snowracers. He's not too crazy about it because it is too fast, and he is not in total control so. Same thing when he was learning to skate, it was "I am not falling down. I don't care if the other kids leave me behind, I am going to take my time".*

This point was confirmed during the first interview with Wade.

Interviewer: *If you could pick one thing that you didn't have to worry about anymore, what would it be?*
Wade: Not getting hurt ever again. Like if we are playing soccer and I get tripped or hockey stuff like that when I get injured. I just hope that I would never get injured.

Interviewer: *Does that ever stop you from playing certain games?*
Wade: Sometimes like when people are at school, like a lot of boys in my class they like to fake wrestle. They are like, "Hey Wade do you want to like fake wrestle?" and I am like, "No thanks" because I know that some time or another someone is going to get hurt so.

This fear of getting hurt seems to affect choices Wade makes during physical education class and recess. The choice to not participate in activities where there is a chance of physical harm eliminates many opportunities for exercise and skill development, especially for a boy in late elementary school. As Wade gets older, and opponents get bigger and stronger, team and competitive games may be completely eliminated from his repertoire of physical activity alternatives. A possible explanation for Wade's fear of performing certain physical skills may be associated to a lack of physical competence. When asked if he would change anything about recess class, Wade shared an interesting perspective.

Wade: *There is a lot of stuff like you are climbing* (equipment), *and there's like, you are holding on to it and there's like a big stationary thing there and there is a...kind of bar going across to this thing down here and it has feet holes and so you hang onto this bar and you move your feet. Well I wish that there was something there underneath it or something cause if you lose your grip or something and then you fall backwards in the sand or something*...(Shaking his head as to say he does not like that piece of equipment)

The fact that people with obesity often do not have proportionate upper body strength to body weight, may be a contributing factor. In this situation, not having the sufficient grip or upper body strength may keep Wade away from climbing equipment or climbing activities. Also, carrying extra body weight potentially adds more force or discomfort to falls, which may explain Wade's fear of that specific piece of equipment. The possible lack of physical strength in combination with anxiety over getting hurt in physical situations where he must support his own body weight certainly limits the type of activities Wade can participate in.

Physical Activity. Although at a physical disadvantage at some activities due to his weight, Wade appears to enjoy participating in team sports and most recess and physical education class games. This point is revealed during the first interview with Wade's parents:

Interviewer: *Okay, so what kind of things does Wade find hard to do?*
Mother: *Difficulty would lie in the physical end of stuff...because of his size, he does have difficulty. It doesn't stop him from participating at all, but to see him there, you know.*

Wade and other classmates primarily played Dodgeball and Chinese Baseball at recess during spring, and group sliding games on toboggans and 'Crazy Carpets' at recess during the winter (See Appendix E). Wade expressed a clear appreciation and enjoyment of recess, mostly due to the fact that he could choose the games he wished to play.

Wade: *You get to be active. You can do lots of things that you can't do inside like run around and go crazy and stuff instead of just walking around and being quiet.*

Although he was asked about games and activities during Physical Education class, in general Wade seemed to focus mostly on the game Dodgeball (Appendix F). When asked if he liked physical education class or recess more, Wade responded:

Wade: *Probably gym class.*
Interviewer: *Yeah? Why do you like gym class better?*

Wade:	*Well there are a lot of things that are fun because the teacher makes up a lot of games that we never even knew about yet. So we can do more things than if we are outside and we just keep on playing the same game, and we don't know any more games.*

Here we see that Wade prefers physical education class over recess because he enjoys the novel games and activities the instructor creates for the class. Playing the same game every recess or physical education class allows some students to excel to a higher performance level, whereas a new game or activity may even out the playing field somewhat. Overall, recess was enjoyed for the freedom of choice, or autonomy, where Physical Education class allowed for exciting new activities. The preference for physical education over recess may also be a result of physical competence, which will be explored in the next section.

Physical Competence. Physical competence seems to have a profound effect on how Wade experienced structured and unstructured physical activity settings. Not surprisingly, the games Wade was skilled at were the games he specifically chose to talk about:

Interviewer:	*Tell me about a typical day in gym class.*
Wade:	*Umm...playing Dodgeball, I like Dodgeball. I am pretty good at it too because we use really...like the balls are about this big* (shows about softball size with his hands), *and they are foam, and if they hit you it doesn't really hurt.*
Interviewer:	*Do you have a pretty good arm, can you throw the balls pretty good?*
Wade:	*Yeah, uh-hmm (with confidence).*

On the contrary, a lack of physical competence also had a significant effect on Wade's experience in physical education classes and recess. One aspect Wade brought up repeatedly was the ability to be a fast runner. During the first interview:

Interviewer:	*Now there are certain kids that seem to be good at all sports and games, why do you think that is?*

Wade: *Because...for example in soccer, there are a bunch of kids that can run really really fast, so they can go a lot and kick really good and...*
Interviewer: *Do you know anyone who is really good at all of the sports they do?*
Wade: *Umm...I know of one kid who is really good at all sports except football.*
Interviewer: *Yeah? So why do you think he is really good at all of these sports?*
Wade: *Uhm, because he can run really really fast.*

Wade's inability to run fast presents itself during the first interview when questioned about what he dislikes about recess:

Wade: *Umm...tag.*
Interviewer: *You don't like tag?*
Wade: *No. I am usually the one that is 'it' and I can never...and like we are usually playing with littler kids that can run really fast. I can't run as fast as them so, I usually end up being 'it'.*

This point is confirmed during the second interview when Wade is questioned about one of the assigned drawings, 'A Bad Day at Recess' (Appendix H).

Interviewer: *You are being chased? Okay, so why is that a 'bad day'?*
Wade: *I just don't like tag because umm...I can't run as fast as other kids so I always end up being 'it' and I get tired a lot easier. So by the time that they run for the 15 minutes I am already tired out so I can't really chase them anymore.*
Interviewer: *So that isn't really fun then is it?*
Wade: *No.*

Having mentioned it on six separate occasions, it was clear that not being able to run as fast as the other kids was a prevalent issue for Wade. This became even more evident when asked why certain kids have a hard time at all games and sports:

Wade: *Umm...some kids are bigger, and they can't really run that fast. And umm...some kids can't really run that fast but they can kick the ball really hard and pass it really well and stuff like that so...*

Eventually, during the latter stages of the second interview, Wade expanded on his thoughts of how obesity contributed to physical competence:

Interviewer: *The last time we talked, I asked you a question about some kids having a hard time when it came to sports, and you said that some of the kids* *who are "bigger" have a hard time. Do you mean bigger 'taller' or bigger 'heavier'?*

Wade: *Heavier.*

Interviewer: *Heavier. Are there some kids who are heavier in your class?*

Wade: *Uhh...yeah.*

Interviewer: *And do they have a hard time?*

Wade: *Yeah, most of the time.*

Interviewer: *Yeah? Why is that?*

Wade: *Well, there are just a lot of small kids like...short, and um they usually, the short people can run a lot faster so...*

Interviewer: *So how do you think these kids who are heavier, how do you think that affects then in gym class?*

Wade: *Just not being able to do a lot of things that the other kids can do. Like for example running fast.*

Interviewer: *What about at recess? Any differences in recess for those kids?*

Wade: *Uh no... basically the same thing.*

Interviewer: *So the biggest thing is running fast?*

Wade: *Yeah.*

Interviewer: *Do you think those kids still like recess and gym class?*

Wade: *Oh yeah, yeah (in a positive voice).*

Interviewer: *If they can't run fast, what other kinds of stuff do they like to do?*

Wade: *Umm...just have fun like...do anything that is fun.*

Talking about 'being heavier' and how it affected physical participation was understandably uncomfortable for Wade. When questioned about playing tag at recess, not being able to run fast, and being 'heavier', Wade's voice dropped, he became visibly uncomfortable, and often did not make eye contact. Not wanting to make Wade feel pressured or embarrassed during these parts of our conversation, questions were often asked how *other* heavier kids feel. As well, Wade often referred to non-obese kids as 'shorter', rather than 'thinner' or 'skinnier'. Choosing these 'non-obese' terms and talking about how "other" heavier kids felt allowed Wade to share his feelings on the subject, without having to feel uncomfortable talking about personal, and possibly painful experiences.

In addition to running, another negative point of focus for Wade was gymnastics. In the first interview, Wade clearly expressed a negative attitude toward gymnastics in physical education class:

Interviewer: *So Dodgeball is probably your favorite gym activity, what is your least favorite gym activity?*
Wade: *Gymnastics* (answered immediately).
Interviewer: *Why is that?*
Wade: *I just don't like them.*
Interviewer: *No? What kind of stuff do you do?*
Wade: *Like we have a bunch of lines and we have to pretend that they are ten meters up in the air, and if we fall off from balancing on that then we fall and stuff. Kind of boring sometimes.*

This dislike of gymnastics was reiterated during the second interview when Wade was asked to explain his picture "A bad day in gym class" (Appendix G).

Wade: *Umm…gymnastics. We're like, right now that is what we are doing, that's why I had to wear shorts. In this picture he is doing exercises like the…mix of jumps like…you have to jump three times then do ahh…I don't know what it is called. I'll just call it a roll, then you get back up and do one more jump then it is the next person's turn.*
Interviewer: *That's not you?* (Pointing to the only person drawn on the page).
Wade: *It's my friend Kevin.*
Interviewer: *Okay. So what do you think Kevin is thinking when he is doing gymnastics?*
Wade: *Umm…well he doesn't really like it either.*
Interviewer: *He doesn't eh?*
Wade: *Basically all of the boys don't really like it.*
Interviewer: *How do you feel about the other kids when they participate in gymnastics?*
Wade: *Mmm…just that as long as everybody has fun it doesn't matter, and nobody gets hurt, like nobody cracks their neck or something.*

In this section, Wade reveals many possible reasons why he does not enjoy gymnastics. As previously mentioned, Wade's fear of getting hurt appears to be one of the reasons gymnastics is not a preferred activity. Wade also commented that "basically all of the boys don't like it", which could be associated with peer pressure, or wanting to fit in. As well, Wade mentioned that gymnastics involved rolling, balancing and jumping, which were performed in front of the other kids. The embarrassment of performing in front of peers, along with the physical limitations obesity has on participating in such activities, are definite possibilities for Wade's dislike of gymnastics.

Belongingness. Wade's need to feel accepted in physical activity settings during school was evident throughout both interviews. All activities Wade spoke about involved friends or other children in his elementary school. During recess activities in which his obesity hindered him, Wade sought out friends and attempted to convince them to play a different game:

Interviewer: *So what if, say everybody is playing tag, what do you usually end up doing?*
Wade: *Umm...go to find my friend and if he is playing tag I will ask him to stop and see, well yeah, ask him to stop and see if he wants to do anything else with me. That I...that we both like.*
Interviewer: *Like what kind of stuff? Say that happened tomorrow, what kind of stuff would you do, you and your friend?*
Wade: *Umm...we'd probably gather up some more people and uh...start kinda like playing hide and go seek sorta thing. Like uh, I don't really know how to describe it.*
Interviewer: *Do you ever do things by yourself at recess?*
Wade: *Umm...nope.*
Interviewer: *You are always playing with other kids?*
Wade: *Yeah.*

Here we have some insight into the importance of being around others during recess. As previously mentioned, Wade does not particularly enjoy the game of tag. Rather than continue playing the game, risking fatigue, exclusion, and possible ridicule from others, Wade chose to not participate, and asked others to join him in a separate activity. Wade makes a proactive decision to not play tag, and instead chooses a less active game (i.e., hide-and-seek). As a result, a lack of physical ability is not witnessed by the other children, and Wade satisfies the need to be a part of his peer group. Wade also mentioned that he "*always plays with other kids at recess*", further supporting the basic need for belongingness.

There was no evidence during the interviews that Wade felt excluded during his physical education classes. Aside from the negative experience of gymnastics, which was more an issue of physical competence, there was no mention of ever feeling left out. It is the organized nature of this class that allows all children to participate with the entire group. Games such as 'tag', or other activities that have the possibility of certain children feeling excluded seem to be avoided at this age group. Wade specifically stated that he enjoyed physical education class more than recess, which may be indicative of the structured nature of the class. The presence of an adult instructor to ensure that there are no children being excluded makes physical education class more enjoyable, especially for a child with obesity.

Participant #2: Eric

Individual Characteristics. The second set of interviews involved an interesting family and a very intriguing eleven-year-old boy. This traditional Ukrainian family was extremely open about their lives and experiences, and did not hesitate to discuss personal events and issues. Although the interviews uncovered a wealth of information about Eric and his experiences, the drawings (See Appendices I, J, K, L) were of little significance, and are not mentioned in this section.

Knowing that the study involved boys with obesity, Eric's father seemed to feel obligated to answer the initial questions by making specific references to his son's eating habits, physical activity patterns, and general overweight condition.

Interviewer:	*So as Eric has gotten older, would you say that he has changed a lot or stayed the same?*

Father: *In what way? You mean eating habits and stuff like that?*
Interviewer: *Okay, you can start with that.*
Father: *Well, he likes to eat, but he is getting better in controlling what he eats. Like he eats less, like before he drank a lot of ginger ale and Coke and that kind of stuff. But now less sugar, so he kind of concentrates on doing that stuff. Basically he...plays hockey too, and he enjoyed it the last five years, but he doesn't have a passion for it. I mean he enjoys sports but he is not competitive. He would rather watch TV and that kind of stuff so.*
Interviewer: *What spurred the change in the eating habits?*
Father: *Just more of our influence. Because he has a tendency of ah...if there is food on the table, even if he is not hungry, he will eat it. And uh, we are trying to instill in him that he has to control those urges.*
Interviewer: *Okay, was it a problem before, would you say?*
Father: *Uhh...yeah, he was too overweight for his height and stuff like that. He is getting better now, because he is starting to grow more and he is thinning out but he still has to...I mean that is good for now, but when he gets older if he still has the same tendencies it's going to be a problem, in the long term.*

Eric's parents' attitudes towards their son's obesity were quite relaxed and indifferent. Eric's parents did not focus on his obesity, and had the attitude that it was a condition that Eric would eventually grow out of. This complacent or neutral attitude is confirmed when asked how Eric interacts with other children at school.

Father: *It is not really a big thing, because we are focusing on telling him not to eat that much, but on occasion he gets picked on that he is a little heavy, but he has a really good personality and gets along with everybody.*
Interviewer: *Would you say that affects his interactions with other kids?*
Mother: *He will come home and tell us that he was told...what did he tell us last week... "go into your hole!" oh yeah "you fat boy, go into your hole!" or something like that (laughing). But kids are kids. Kids that age will think things like that. I mean a kid could be really skinny and they will say, "all you are is skin and bones".*

By seeing other children commenting on their son's obesity as "*kids will be kids*", it is clear that they do not see Eric's obesity as a major concern. Although technically classified as obese by his BMI score and visual rating, Eric was the 'thinnest' of all participants in the study. It is possible that as Eric has grown over the last few years his size and weight have changed, and he is heading toward a leaner body type. His parents may view Eric's obesity as 'baby fat', and assume that he will grow out of it. Regardless, throughout the interview Eric's parents focused more on his academic accomplishments rather than his physical competence and obesity.

It was clear that Eric and his family were very close, and that a lot of time after school and on weekends was spent together. This relationship allowed Eric's father to give great insight into the personality and general interests of his son. Eric's father soon realized he did not have to talk about obesity and sports, and focused in on other contributing factors in Eric's life.

Interviewer: *Does Eric have any unusual aspirations or plans or dreams?*
Father: *Uh, not really just doing well in school.*
Interviewer: *What is Eric most curious or fascinated with?*
Father: *Just new things. Like on the Internet, you know finding new games, new challenging games that way. He has that Gameboy, and he's incredible on that thing. He uses it all of the time, he spends hours on that perfecting it.*
Interviewer: *What kind of thing does Eric find easy to do?*
Father: *Academics, very. Computers.*

These three separate passages indicate that from the parent's point of view, computers (i.e., Internet and Gameboy), and doing well in school are important aspects of Eric's life. Eric also attends Ukrainian school every Saturday morning for four hours, which he also excels at. The parents were very positive people, and were extremely proud of Eric's academic achievements. They gave many examples of his scholastic endeavors, which seemed to be the most important aspect of Eric's life.

Physical Activity. Whereas competence in academics is encouraged in Eric's life, his parents emphasized that physical activity and sports should be viewed as a leisure activity to be engaged in purely for enjoyment.

Father:	*He likes playing, and things like that. Umm… from that point of view he is not competitive. He is competitive in school, he wants to get the top marks. And that is okay, but when it comes to sports it is more just for fun.*
Father:	*In regards to sports and stuff, he enjoys it for the fun of it, and that is what we instill in him is that it is fun and nothing else.*

During the second interview, Eric expresses a similar attitude regarding physical activity.

Interviewer:	*So how do you feel when everybody else is playing a sport that you can't do very well at?*
Eric:	*Well I will just try my best and if I can't get along that well, I will just try and have fun. Well sometimes I just kind of turn away and walk away and don't really…it doesn't mean that much so.*

It was evident that Eric's parents encouraged sports and activities for fun and enjoyment, and not for competition or physical fitness. Eric's inability to perform at a competitive level could be a contributing factor in this overall attitude toward activities and sports, as well as that of his parents. It is difficult to explain why achievement in activity seems to be devalued by Eric and both of his parents. On one hand, physical competence may be devalued because Eric is unable to compete at a high level due to his obesity. On the other hand, Eric's parents may have always de-emphasized competitive sports and activities, thus limiting his participation and skill development. Despite the lack of emphasis on achievement in sports and activities in his home, Eric enjoyed a variety of sports and school time physical activities. The next section of dialogue sums up Eric's general perceptions on gym class and recess.

Interviewer:	*What are some of your favorite things about gym class?*
Eric:	*Well you get to run around and sometimes we go outside in the summer and get some fresh air. And you just like get to have fun and do some sports.*
Interviewer:	*What is you favorite thing about recess?*

Eric: *You get some fresh air, you get to hang out with your friends, and you have a good time before the next subject you have to do.*

Interviewer: *What do you think is the biggest difference between gym class and recess?*

Eric: *Well, gym is more under control, because the teacher is there supervising everything. Like they are supervising outside but you never know what can happen outside.*

Interviewer: *Which do you like better, gym class or recess?*

Eric: *I like gym.*

Interviewer: *How come?*

Eric: *Well, I think it is more organized and the popular kids outside get to choose their teams first, because they are the popular ones and no one can tell them what is wrong and what's right. And they always get the good people on one side and the bad people on the other. So, and in gym, the teacher knows who should be separated into fair groups.*

Eric begins by stating what he feels is positive about physical education class and recess: 'get some fresh air, hang out with friends, and have some fun'. A question about the difference between the two settings revealed the importance of fair competition to Eric. Physical Education class was preferred due to the fact that the instructor chose the teams evenly in terms of skill level. Although Eric enjoys participating in physical activity, there has to be a sense of 'even competition' for him to continue to participate. Recess does not always guarantee that teams will be chosen with equal skill levels, or that everybody will get equal playing time, especially those with obesity. As previously mentioned by his parents, others have ridiculed Eric over his weight. Physical education classes may provide a safe setting in which an obese child can participate to the best of his or her ability, and not necessarily worry about rejection or ridicule from other kids.

Physical Competence. During the parent interview, Eric's physical ability and his parents' attitudes towards physical ability were discussed.

Interviewer: *What about in terms of sports or games, stuff more physical, if he can't get it right away?*

Father: *Like in soccer, he plays soccer, and uh, he's not a fast runner. He's not built for running, he's built for strength. So he just kind of plays to* *his limit. And he doesn't get frustrated by the fact that he is not the fastest guy running or anything like that. He knows his limitations and that kind of thing you know.*

Interviewer: *So it has never stopped him from participating, or enjoying sports?*

Father: *No, no and the other thing is that he is overall good at everything. Like recently there was a handball tournament that they had in school, and the little bugger got the gold medal, he was the goalie. So in regards to just um, being a little bit...I don't want to say overweight, but he is just stocky. Because of that he doesn't have the ability to be fast at running or skating or whatever, but he is good at other things in those sports so he enjoys it that way.*

Eric's father focuses on the strengths or positive aspects of Eric's physical attributes. Due to his obesity, Eric does not have the physical capacity to run or to skate very fast. The father recognizes this, but shares Eric's *other* physical competencies, such as his 'strength' and his success as a handball goalie. This type of encouragement from his parents (i.e., goalie, positions dependent on strength) may influence Eric in determining his future level of participation and choice of physical activity. The first interview with Eric revealed some of his views on physical competence.

Interviewer: *What would you like to be really good at doing?*

Eric: *Better at maybe skiing faster or running faster. Yeah, cause to do things better, well, lots of kids seem to go faster and like because they think they are so popular that they lapped everyone else, yeah, they think they are so popular and that everything revolves around them.*

Interviewer: *Yeah? Just because they run fast?*

Eric: *Yeah, or they do something that someone else can't.*

Later on in the conversation Eric expands on his views of physical competence.

Interviewer: *What about kids who are really good at sports and games? Is there any?*

Eric: *Those are the kids who think they are really popular. Well, not like...there is just this one guy I know that doesn't really brag when he does his homework or at work, but when he gets on the field like, in soccer, he just, he can run fast and literally pass it to everybody and he...he sometimes brags.*

Interviewer: *Yeah? Would you like to be that good?*

Eric: *Mmmm...not really, I would just like to be average.*

When asked about what he would like to be able to do better, or what makes other kids 'good' at sports, Eric continually spoke about the ability to run fast. Due to the games and activities that Eric predominantly spoke about (e.g., soccer, football), being able to run faster would certainly be beneficial. His mention that some of the other children who are fast runners or are good at sports and games brag, or "*think they are so popular and everything revolves around them*" indicates that Eric perceives running speed and athletic skill as important attributes contributing to increased peer status, at least in physical activity settings.

The physical limitations of obesity typically prevent overweight children from running as quickly as others. Eric continued to participate in physical activity during the school day, but frequently mentioned that it was '*just for fun*" or "*I would just like to be average*". This type of response may be a sort of coping mechanism to deal with his inability to perform as well (e.g., run as fast) as other kids. The pressure of physically performing at a high level is relieved if sport is viewed for enjoyment or entertainment, rather than for the purpose of winning or being the best athlete. Eric can continue to participate with lower skills than others and still feel successful as long s he has fun. This is likely why equally skilled teams are important to him; it is difficult to experience fun and enjoyment when teams are so unequal or mismatched that one side is completely ineffective against the other, regardless of effort, strategy, or tactics used.

Belongingness. Eric's perceptions of belongingness and peer acceptance were overwhelmingly positive. Eric appears to be a very well educated child, who is very comfortable with himself and his place at school. Evidence of the need to belong started to reveal itself during the second interview with Eric.

Interviewer: *Is it more important to you to have one or two really good friends, or lots of 'not so close' friends?*
Eric: *Two close friends.*
Interviewer: *Two close friends, why is that?*
Eric: *Because you can... if you have a whole bunch of not too good friends they can always say well 'you aren't allowed to go here', and other times when they really need your help they will say, 'come here', and then when they are with their group and stuff they will say 'go away' so.*
Interviewer: *Okay, so do you think having one really good friend to play with at recess makes a difference?*
Eric: *Yep. Because if you have no-one out there you would be sitting there, just trying to find someone, but they are all rejecting you. And if you have one person, you can at least talk to them or play football...pass.*
Interviewer: *Okay, what about in gym class? Does it matter if you have a really good friend in gym class?*
Eric: *No not really because like I said, the teacher is watching and if someone is not being fair to someone else, it is really, they will get in trouble. But with the teacher around it is more fair.*

This passage gives more insight into the differences between physical education class and recess. The need to have at least one or two friends at recess is important to Eric, especially in cases where children tell him that "*you aren't allowed here*" or "*go away*". In this case, having at least one close friend to play with at recess alleviates the feeling of rejection imposed by other children. This is not necessarily the case during physical education class where an instructor is present to make sure everybody is being '*fair*'. The need to feel like part of the group is satisfied in physical education class as everybody is playing under the same rules, and no one is made to leave the group. To get a better insight into how Eric feels about recess, he was asked:

Interviewer: *Have you ever felt lonely or not part of the group at recess?*
Eric: *Nope. I always find something to do and I just do it. And I just find friends so that I can go with them.*
Interviewer: *Okay. Do you think it is important to be a part of the group?*
Eric: *Umm...well not always, usually, yeah. Well, I am kind of in between. So I can be in the group, or sometimes I just don't want to be there and I just want to be by myself or with a couple of friends. But if I am*

alone I can find something to do but I would rather prefer to be with someone else.

Interviewer: *Does it ever make you feel bad if you have to do things by yourself?*

Eric: *Well sometimes yeah, if it is like for three days of something. But if it is only for one day.*

Interviewer: *It doesn't matter much then?*

Eric: *No.*

Eric states that he does not ever really feel lonely or left out during recess; he basically finds other friends and joins in the activity they are doing. While he prefers to associate with peers, spending time by himself does not seem to be a major concern for Eric. The amount of time being spent alone also seems to play a role in Eric's sense of belongingness. The thought of spending one recess by himself did not concern him but three days straight by himself at recess would certainly bring on feelings of loneliness and rejection.

The fact that Eric does not seem to experience loneliness during recess or physical education class may be partially explained through his relationship with his family. Page et al. (1994) have postulated that a person will not necessarily feel lonely if their belongingness needs are satisfied through other close or intimate relationships. Although Eric will find friends to play with during recess, his basic or overall need for belongingness may be satisfied through time spent with his family. His parents have instilled strong family values in him, and spend dinners, weekends, and family outings together on a regular basis. Even if Eric did not spend recess or physical education class associating with his peers, there is comfort in knowing that he has a strong and open relationship with his parents and older sister.

Eric's overall positive attitude towards physical education and recess may be explained through a number of factors. Although technically classified as obese according to his BMI score, Eric has the lowest score of participants of the study. This 'lower' level of obesity may increase Eric's quality and quantity of participation, thus allowing for greater success and peer acceptance at recess and in physical education class. Second, Eric's view that physical activity is a leisure activity enables him to focus on goals related to having fun and enjoyment, while avoiding the inevitably negative outcomes associated with the goal of being the best athlete. As long as Eric enjoys himself, he accomplishes his participation goal and experiences satisfaction. Finally, a strong familial relationship may be satisfying Eric's need for belongingness. Having a close relationship with his sister and both of his parents helps to overcome possible feelings of loneliness that may occur due to peer rejection or exclusion.

Participant #3: Craig

Individual Characteristics. The third set of interviews involved a 12-year-old boy named Craig and his mother and father. Although his parents were very open and responded to all questions with enthusiasm and detail, Craig was very elusive, and kept his answers short and to the point. Craig often chose to speak of how 'others' felt, and drew pictures of 'other children' and their experiences. From the start, Craig set the boundaries of the conversation; he answered the questions, yet did not divulge enough information to feel embarrassed or insecure.

According to his parents, Craig enjoys a variety of different activities, ranging from football, Scouting (Boy Scouts), wrestling, and drama. His mother and father describe Craig as "*very friendly and very sociable*" as well as a "*diplomat*". Overall, Craig seemed to balance his time well between school, extra-curricular activities, and spending time with his family and friends.

Even though his parents made reference to how Craig was 'outgoing' and 'highly social', this was not observed during either interview with him. Throughout the interview process, Craig answered all questions in a low monotone voice, and often avoided eye contact all together. Although extremely shy at first, Craig did open up and become more talkative towards the end of the second interview. Craig did answer all of the questions, but did not seem to enjoy the whole process of being interviewed about physical education class and recess activities.

The second interview began with questions regarding the four pictures that were drawn during the previous visit (See Appendix M, N, O, P).

Interviewer: *So this is the first drawing, a good day in gym class. Can you tell me what is going on here?*
Craig: *It is just wrestling.*
Interviewer: *Are you in this picture?*
Craig: *Yeah, I think, I don't know. I can't draw.*
Interviewer: *Okay, that's fine, this is good. Do you remember putting yourself in the picture?*
Craig: *Ummm…not really.*
Interviewer: *So who do you think is in the picture?*
Craig: *Just two people.*
Interviewer: *Just two people? So why is it a good day?*
Craig: *Because everybody enjoyed the wrestling.*
Interviewer: *Okay. What do you think these people are thinking?*
Craig: *They…I don't know? I don't really think of anything when I wrestle so…*
Interviewer: *No…so nothing is really going through your head here? (pointing at the picture)*
Craig: *No. Just hoping that I don't lose or something.*

Craig answers the first few questions quite vaguely, and by saying he is not in the pictures, does not have to make any specific references to his personal feelings. Even though Craig states that the picture contains two other children, when asked what was '*going through his head*', he makes a direct reference to how he feels in that specific situation. When asked about the second drawing (Appendix N), Craig responded:

Interviewer: *Tell me what is going on in this picture.*
Craig: *Playing football.*
Interviewer: *Are you in this picture?*
Craig: *No, not really.*
Interviewer: *Not really? Well how is that...you kind of are, or you aren't?*
Craig: *Umm...no.*
Interviewer: *You don't like to draw pictures of yourself?*
Craig: *No.*
Interviewer: *No? How come?*
Craig: *I don't look in mirrors much.*
Interviewer: *No, why is that?*
Craig: *I just don't really care.*
Interviewer: *Do you think other people care?*
Craig: *Not really no.*

Although it is impossible to explain exactly how he feels, this last passage may give insight into what Craig thinks about his physical appearance. By stating it is not him in the picture and that he "*doesn't look in mirrors much*", Craig protects himself from admitting to the possible embarrassment or social stigma commonly associated with obesity. If he is not satisfied with the way he looks, understandably, Craig would not want to draw pictures of himself, let alone talk to a stranger about his physical appearance. Although a strong rapport was built over the two interviews, there was still hesitation and reluctance when it came to talking about physical appearance.

Physical Activity. When questioned about physical education class and recess, Craig was very clear on what he did and did not enjoy.

Interviewer: *What are some of your favorite things about gym class?*
Craig: *Well you get to try a lot of things. Ahh.. you get to see how other people do it and it helps you get in better shape.*
Interviewer: *Do you think that by being in gym class you are getting in better shape?*
Craig: *Yeah. Especially with my gym teacher.*
Interviewer: *Does he work you hard?*
Craig: *Yeah.*
Interviewer: *Can you keep up all of the time?*
Craig: *Not all of the time.*
Interviewer: *So what are some of your favorite things about recess?*

Craig: *Umm...you can do whatever you want. You don't have to worry about anything.*
Interviewer: *What do you think is the biggest difference between gym class and recess?*
Craig: *Recess you get to choose what you want to do and gym class you, your teacher tells you what to do.*
Interviewer: *Do you like that?*
Craig: *Sometimes I'll do it if I am told, but other times I will do it really fast if I am told to do it.*

In this passage, Craig explains the reasons why he enjoys physical education class: getting to try new activities, learning from watching others, and a chance to get in shape. At recess, Craig mentions he can "*do what he wants*" and "*does not have to worry about anything*". Although both environments provide an arena for physical activity and peer relationships, clearly Craig experiences physical education class and recess differently. To Craig, physical education class is a regimented and structured learning environment, whereas recess allows for more personal freedom and self-discovered movement. Aside from these basic qualities he enjoys about physical education class and recess, what seemed to overly preoccupy Craig was the relationship with his physical education instructor. In the previous passage, Craig feels he is getting in better shape due to the fact his teacher makes the class physically demanding. Craig also mentions that he is not always able to keep up with the rest of the class, which may cause a sense of resentment or dislike of the instructor. This point is confirmed later in the conversation with Craig.

Interviewer: *Okay, what do you think is the biggest difference between gym class and recess?*
Craig: *You get to talk to your friends. Umm...you don't work as much. And you make your own positions during a game, and stuff...*
Interviewer: *Which do you like better, gym class or recess?*
Craig: *I like recess a lot.*
Interviewer: *Why?*
Craig: *Because it is fun, you get to go outside and do whatever you want.*

Interviewer: *If you could change some things about gym class, what would you change?*
Craig: *I actually wouldn't change anything, except the way our gym teacher is. That is the only thing I would change.*
Interviewer: *Okay, so you would just change the teacher?*

Here Craig confirms the preference for recess over physical education class, mostly because of the freedom to choose the activity and position(s) played during the games. Although physical education class is enjoyed, Craig again mentions his overall dislike of the teacher. While explaining a "bad day in gym class" (Appendix O) during the second interview, Craig gives further insight into his relationship with his physical education instructor.

Interviewer: *Okay. Alright the next picture then, a bad day in gym class. Okay, what is going on here?*
Craig: *I am playing soccer.*
Interviewer: *You are playing soccer. Is that you?(pointing to the figure in the red shirt)*
Craig: *Yeah. That is my gym teacher.*
Interviewer: *In the blue shirt? And what are you doing?*
Craig: *Just playing soccer.*
Interviewer: *And why is that a bad day?*
Craig: *I never really, I don't really enjoy soccer now. No.*
Interviewer: *What is the teacher doing?*
Craig: *Telling me what to do.*
Interviewer: *Yeah. How are you feeling at this point?*
Craig: *I don't really care.*
Interviewer: *And how do you think the teacher feels?*
Craig: *(5 second pause)...that I have to work harder.*
Interviewer: *Yeah...what else?*
Craig: *That... I don't know. I don't think anything else.*
Interviewer: *Yeah, do you get along with your Physed teacher?*
Craig: *Yeah.*
Interviewer: *So what is your relationship like?*
Craig: *Umm...I do what I am supposed to do so...we just get along fine. (in a sarcastic tone of voice)*

The drawing of a bad day in gym class illustrates a negative experience Craig may have had this last year. The combination of having the physical education instructor telling what to do, and to work harder, as well as the physical strain endured during soccer, helps to explain Craig's adverse outlook on physical education class and his instructor.

This is a prime example of how influential an instructor can be on a child's physical activity experiences. Thinking that the teacher feels that "*I have to work harder*" and that "*if I do what I am supposed to do we get along just fine*", may create resentment and negative association with organized physical activity. Being obese and participating in certain physical activities can be extremely difficult; the added pressure of feeling your instructor does not think you work hard enough is a recipe for failure. Recess affords the freedom for children to choose the activity as well as the intensity level and position, allowing children like Craig to experience success in that environment.

Physical Competence. In spite of his obesity, Craig still involves himself in athletics and sports during physical education class, and especially during recess. Consistent with the literature regarding physical competence for young boys, it appears that Craig values being able to perform at a competent level during physical activity. Although Craig did not boast of being the best athlete in his class, he shared both positive and negative examples of the sports and activities he participated in.

Interviewer: *Okay. Alright. Anything else you wanted to add to the pictures? If I asked you to draw four new pictures, would you do anything different, besides adding other people?*
Craig: *I would probably do some things different.*
Interviewer: *Anything you would want to tell me about?*
Craig: *Umm...for bad day in gym, I could put gymnastics. For good day I could actually put table tennis.*
Interviewer: *You like table tennis eh?*
Craig: *Yeah, we are starting that tomorrow.*

Interviewer: *Well that sounds like fun, I like table tennis too. And why is gymnastics a bad day?*
Craig: *I find that I just can't do some of the things.*

Much like every other child in this study, Craig mentions gymnastics as an activity that was disliked, stating "*I find that I just can't do some of the things*". The nature of gymnastics often involves flexibility, supporting your own body weight, and muscular endurance, which are not usually qualities obese individuals usually possess. In contrast, Craig states that he could have drawn table tennis as a "good day" in physical education class. Physical competence in this activity can be achieved through quick reflexes and good hand-eye coordination. By focusing on activities where physical attributes other than endurance are important, Craig is able to feel competent at a number of different sports. This point is illustrated further in the following passage.

Interviewer: *Which sports of activities are you good at?*
Craig: *Well, in hockey, when I usually play with my friends, usually we play street hockey and I usually play goalie, and I am really good at that. yeah.*

Here Craig feels competent being a goalie while playing street hockey with his friends; a position where reflexes and size are more critical for success than physical endurance. Craig expands on this point in the next paragraph, and explains what he feels is necessary for him to feel competent during physical activity.

Interviewer: *You told me that you would like to be a better athlete but haven't found the right sport. So how do you think you could become a better athlete?*
Craig: *Well, find the right sport. I would probably work really hard at that. And...probably strengthening up my muscles. yeah.*
Interviewer: *You would like to be stronger?*
Craig: *Yeah.*
Interviewer: *Okay. Do you know other people who are better athletes because they are stronger? What makes someone a good athlete?*
Craig: *Well one kid I know he is really good at everything, and he is really strong.*

Interviewer:	*What do you think are your best physical qualities right now? In term of being an athlete.*
Craig:	*I am sort of good at wrestling. And I am okay at volleyball.*
Interviewer:	*What makes you good at wrestling?*
Craig:	*Because if I really enjoy doing something, I will usually do really good at it. If I don't enjoy it I will do bad.*
Interviewer:	*What kind of sports or positions do you like to play because of your skills?*
Craig:	*I don't really like soccer because you can't really use your arms for anything. Mostly your feet.*
Interviewer:	*You like using your arms better?*
Craig:	*Yeah.*

To feel a sense of physical competence, Craig has focused his efforts into activities in which he can rely on hand-eye coordination and short term physical strength. Activities such as table tennis and volleyball, where a person can compete quite well by just using their arms. By taking part in wrestling, Craig is able to use his size as an advantage over smaller opponents, and experience some degree of success. By wanting to increase his competence at wrestling, Craig has mentioned his desire to increase his physical strength and build up his muscles. Fortunately, Craig has found a number of activities in which he can use his size, strength and skill to experience success. This success will hopefully encourage Craig to continue to participate in physical activity and pave to the way to a healthier lifestyle.

Belongingness. The link between physical competence and belongingness was clearly seen throughout the interviews with Craig. Having the physical skills and talents to meaningfully participate in physical education class and recess activities was directly related to the degree to which Craig felt accepted by his peers.

Interviewer:	*Okay. What kinds of games or sports make you feel like more part of the team or more part of the group?*
Craig:	*Football, wrestling, rugby.*
Interviewer:	*And why do you feel like more part of the group in those sports?*

Craig: *Because it is a bit rougher, and people sort of look up to me when it is like that. I don't know why...you know.*
Interviewer: *You don't know why but they look up to you?*
Craig: *They sort of want me to do stuff.*
Interviewer: *What kind of stuff do they want you to do?*
Craig: *Ummm...there is a really athletic guy, and when we play football no one wants to touch him. So everyone tells me to try and get him.*
Interviewer: *Can you get him?*
Craig: *If he is heading right towards me but I can't catch up to him.*

In this instance, Craig has assumed the role of "tough-guy" and is proud of being nominated to "*try to get the athletic guy*". By using his size as an advantage, and participating in 'rougher' activities, Craig gets reassurance and praise from his classmates, thereby satisfying his need to belong. Craig confirms this point during the next part of the conversation.

Interviewer: *Do you think that if you were a faster runner or better at sports you would feel like you were more part of the group?*
Craig: *Yeah, because really all of the groups are centered around sports. So, if you are really good at one group of things, you will be with one group and...yeah.*
Interviewer: *So what group are you in?*
Craig: *The rough group...mostly, but other groups too.*
Interviewer: *What do you mean by the 'rough group'?*
Craig: *The group that plays hockey and football.*
Interviewer: *More physical type of sports.*
Craig: *Yeah.*

Again we see that Craig has labeled himself a part of the "rough group", solidifying a place among his peers. However, belongingness often reaches beyond group activities and is necessary in individual or small group situations.

Interviewer: *Does having one really good friend to play with make a difference at recess?*
Craig: *Yeah, because most likely they are not going to tell you that 'you can't play' or that 'you suck' or whatever.*
Interviewer: *What about in gym class, if you have one really good friend does it make a difference?*
Craig: *Yeah, cause there is someone you can trust to help you.*

In a situation where the recess or physical education class activity involves a skill that an obese child cannot perform very well, it is important to an alternative agenda, or an escape from a difficult or embarrassing situation. Craig's obesity most likely limits participation in a number of activities, which may lead to feelings of rejection or isolation. Having one close friend who would never say "*you can't play*" or "*you suck*" and that "*you can trust to help you*" gives comfort and security in physical activity situations. The importance of feeling belongingness is expressed in the following passage.

Interviewer:	*Do you think it is important for other kids to feel accepted or part of the group?*
Craig:	*Yeah...Cause it is one of our basic needs, and ummm...I don't really like to see another kid get rejected. If you really try and do okay, they won't bug you.*

This short statement seems to sums up Craig's overall feelings towards physical activity and sense of belongingness. Craig understands that feeling accepted by others is a basic need, not only for himself but for all children. Craig has learned that you do not have to run the fastest or jump the highest to be accepted, you just have to "*really try and do okay*" and you will be appreciated. Craig seems to have found his niche and wants to improve on the skills he possesses. Focusing his efforts on skills which involve more strength and hand-eye coordination has allowed him to feel competent and accepted around his peers, and assures that he will continue to pursue those athletic endeavors.

Participant #4: Grant

Individual Characteristics. The interviews with Grant and his mother were drastically different from interviews with the previous three participants. Grant's mother indicated that she has been divorced from Grant's father for 10 years, so she has raised Grant by herself since he was a young child. His mother also stated that he was always larger in size than the other children, especially since he began elementary school. In addition, Grant and his mother have lived in four different cities in the last six years, meaning Grant has had to try to make new friends on each separate occasion.

Interviewing Grant's mother provided basic knowledge on some of Grant's personality traits, skills, and general likes and dislikes throughout elementary school.

Mother: *I think a few years ago, he lacked confidence and self-esteem in anything, and today that isn't as true.*

Interviewer: *What do you think was the biggest reason he lacked that self-esteem in the latter half of elementary school?*

Mother: *Well, I don't know exactly. He has had trouble relating to kids his own age since he was very young. Early school years, from kindergarden on. And academically he is a year ahead in one subject officially, and he is really quite advanced in several other of the core subjects. The ones where social skills aren't a key factor, you know participation and things like that. I think that where he is confident and his self-esteem is higher are in things that are academic.*

His mother stated that although Grant excels academically, his social skills are not as advanced. When asked what Grant finds difficult, his mother responded:

Mother: *I think he finds it hard to express himself sometimes. I think that is pretty common.*

Interviewer: *Hard to express himself with you or with friends or…*

Mother: *I think with me but more likely with others. You know social skills, like picking up the phone and calling up some guy on Saturday and saying lets go bowling or lets go see a movie or do you want to come over. I think that is a very hard call for him.*

The combination of having to make new friends after each move, and always being physically large for his age may partially explain why Grant has had difficulty expressing himself socially over the years. The social stigma of obesity, especially at a young age, may have had a negative impact on his attempts to "fit it" and make new friends. Constantly changing schools, and always having to make new friends would make it difficult to have opportunities to practice social skills, and build lasting friendships. In addition, performing well academically does not necessarily include having to talk or interact with other children. A lack of social acceptance and poor social skill development may be responsible for Grant's current social skill repertoire. The next section looks at how Grant's social situation and obesity reflects on what activities and sports he chooses to engage in.

Physical Activity. Grant's recess and physical education class experience is quite different from that of the other participants in the study. Grant was the least active participant and had the highest BMI score of the group. Grant's typical recess experiences (See Appendixes Q and T) are discussed in the following passages:

Interviewer: *Alright. Tell me about a typical day at recess.*
Grant: *Hmmm...We really pretty much just sit around and go inside and play chess, with other kids. Sometimes with one kid and sometimes with a whole group of people who just keep on joining and joining and joining. That is pretty much really all that I do at recess.*
Interviewer: *Just chess?*
Grant: *Ummhmm.*
Interviewer: *The days that you didn't play chess, what would you do?*
Grant: *I would rather just uh...I would pretty much be sitting by my locker or wandering around the school.*

Later on in the conversation:

Interviewer: *What are some of your favorite things about recess?*
Grant: *Well ummm, one part you get to take a breather from all of these classes, also, I am not really sure it is the best thing yet, but it gives me time to do my last minute homework (laughing).*
Interviewer: *Which do you like better, gym class or recess?*
Grant: *Recess.*
Interviewer: *Yeah, why is that?*
Grant: *Well, for one thing you get to choose what you are doing and...I don't really...I mean...inside...I prefer like being sitting down, just relaxing sitting down, playing chess, not really doing very much like moving around very quickly, yeah.*

Where the other participants viewed recess as a time to play active games and activities with their peers, Grant spends the majority of his recess time inside playing chess or spending time by himself. Aside from being a non-active game, chess is also a game that requires little social interaction. Comments such as "*I prefer like being sitting down*" and "*not really doing very much like moving around very quickly*" are indications of how Grant feels about physical activity. When asked about his physical education class, Grant shared some of his perceptions.

Interviewer: *Do you enjoy it?(physical education class)*
Grant: *Well I enjoy parts of it, and parts not so much.*
Interviewer: *What parts of gym class do you like the most would you say?*
Grant *Well, some part...one part is the wrestling and uh...I can't really think of any other part I like.*
Interviewer: *Okay, what sports or activities are you good at?*
Grant: *Good at ummm...One thing I know wrestling. Uh...umm...umm...*
Interviewer: *What do you enjoy?*
Grant: *I enjoy a lot of things I am not necessarily good at. Well, one part... I had fun last year in badminton in gym class. Umm...I don't...there isn't really much that I...uh...really liked.*

The only activities that Grant spoke of that he enjoyed was wrestling and one brief badminton experience he had the previous year. In general, Grant did not speak highly of physical education class or any sort of physical activity. His drawing of a "bad day in gym class" (See Appendix S) was a detailed description of an embarrassing and potentially dangerous experience during a gymnastics class.

Interviewer: *Okay, bad day in gym class, you have written a lot of explanation on that one. Okay tell me what is going on here.*
Grant: *This is just the first part, I am going up here. You have to go up, I don't even make it all the way up, then I slip and fall, land on the ground, and thud. I hit the wall. It's funny, I wasn't even really feeling very dizzy after that but...*
Interviewer: *Did you hurt your self?*
Grant: *It only hurt for the second I hit the wall, but it was so bad that I definitely remember it.*

Interviewer: *So you were just trying to jump up to grab the bar then?*
Grant: *No, it wasn't exactly really right. Especially since I am supersized then I shrink down (talking about the size differences in the drawing). This is supposed to be underneath me (the table), then they pull it out. I mean...*
Interviewer: *Oh, so you are holding on and then they pull out the bench from underneath you and you are supposed to hold on?*
Grant: *Yeah, I am supposed to pull myself up. I didn't even get past my nose and then I fall, and thunk!*
Interviewer: *And then you hit your head against the wall?*
Grant: *Yeah.*

This excerpt details an unpleasant incident in Grant's physical education experience. As with the other participants, gymnastics is an activity that Grant finds particularly difficult. Although physical education class should typically contain activities that everybody can enjoy, an event like the one Grant experienced could have negative long-term effects on his attitude towards physical activity.

Physical Competence. A major contributing factor in Grant's avoidance and dislike of physical activity is his lack of physical competence. Grant's mother shared some of the experiences she remembers about her son's involvement in physical activity.

Interviewer: *Has Grant ever shared any experiences about sports or activities he plays in at recess or in gym?*
Mother: *Yeah, he does, and I find it pretty upsetting actually. Grant took volleyball, this volleyball session of school for two seasons last year and this was supposed to be something fun, and for exercise, cause mom said he needed to do it, so he went and did it...And I had to stop going because...he kept going, but I had to stop being there because I was so frustrated watching him on the court getting hit with the ball, just not snapping, just not getting the idea and having fun with it. And the coaches and things weren't motivating the kids to do that.*
Interviewer: *So what sports does Grant like to participate in?*
Mother: *Umm...wrestling. He likes riding his bike. He plays some golf. I tried to get him into tennis but that didn't go too well. He likes badminton and I don't know...he might tell you something else but those would be the only ones I would say.*

From what was said during the interview with his mother, it appeared that Grant has very few physical or sports skills in his repertoire. Being obese or overweight throughout elementary school may have made it difficult to acquire the basic physical skills that are usually taught and learned in the first few years of school. Grant shares his feelings on trying to participate in an activity that he finds challenging:

Interviewer: *Okay. How do you feel when everyone else is playing a sport that maybe you can't do quite as well at?*
Grant: *Well, it feels frustrating, and kind of...feeling "we have to do this, I can't do anything at all" (kind of laughing).*
Interviewer: *Does it make you not want to participate at all?*
Grant: *Well I do like to try at first but if I really can't, really get anything whatsoever then I kind of give up, after awhile.*
Interviewer: *But you always give things a try first?*
Grant: *Mmmhmm.*

Grant takes the attitude that he will try most games or sports, until he finds out if he is competent or not in that activity. If he has difficulty performing at an acceptable level, he feels frustrated and will eventually give up. With obesity, it is difficult to participate at a high level of physical endurance or speed, which are often large parts of elementary school activities (e.g., soccer, football, tag, etc.). Constant failure or the inability to compete successfully with his peers has likely driven Grant away from wanting to participate in physical activity, and influenced him to pursue more sedentary activities (i.e., chess).

During the first interview with Grant, questions were asked to see if there was any skill, or specific sport he would like to become better at.

Interviewer: *What would you like to be really good at doing?*
Grant: *Well...one thing volleyball, and uh...I mean to be able to run faster, like when we are doing laps for teams...and we have to go around in twelve minutes and 1.1Km run around the school area.*
Interviewer: *You would like to be able to do that faster?*
Grant: *Yeah. I can't really think of anything else.*

Just like the previous participants in the study, the ability to run fast is a highly valued skill. Since most active games require some degree of either speed or endurance, Grant's inability to run fast or for an extended period of time directly affects his physical activity experiences. Although Grant did not express much interest in physical activity, he was questioned on what physical attributes or skills he thought he possessed.

Interviewer: *Okay...What do you think, right now, what do you think are your best physical qualities, when you are in phys. ed. or when you play games or sports or are being active?*
Grant: *I find that I am always having a lot of energy released at the beginning of stuff, games.*
Interviewer: *What else?*
Grant: *Probably the biggest thing uh...I have noticed that I am pretty strong, overall pretty strong.*
Interviewer: *Is that why...I remember we were talking about you going into wrestling...*
Grant: *Yeah, yeah.*
Interviewer: *Do you think your strength helped you a lot?*
Grant: *Yeah.*
Interviewer: *Do people treat you differently when you play a sport you are good at? Like in wrestling, do people treat you differently when they see you wrestle or see you do something physical that shows how strong you are. Do you think people treat you differently?*
Grant: *Yeah.*
Interviewer: *Yeah? How so?*
Grant: *Well first of all, I think that they, people would probably be more amazed. And uh...maybe they'd...I am kind of uh...a little chubby and uh...probably more surprised and...try to be more of a friend to make a new impression. Instead of, just ah, kind of, getting an idea of being friends with them, the other group, whatever.*

Grant states that his greatest physical quality is his strength, and this perception that he is stronger than his peers has given Grant some degree of perceived physical competence. His overall size and weight give him more stability and momentum to perform certain activities, namely wrestling. Feeling stronger, and probably other children assuming he is stronger because of his weight, have directed Grant into an activity where his obesity almost becomes an asset. Grant also mentions that performing well at wrestling or other sports might influence children from the "*other group*" to become friends with him, a topic that will be discussed further in the next section.

Belongingness. It is difficult to predict the amount of belongingness any one individual needs or desires. Although some degree of perceived acceptance is considered a fundamental need, the quality and quantity of the need for social acceptance varies from person to person (Baumeister and Leary, 1995). The lack of perceived social acceptance in physical education class or recess does not mean a child's belongingness needs cannot be satisfied elsewhere. Upon reviewing the interviews conducted with Grant and his mother, it seems that Grant did not look to physical activity environments to satisfy his need to feel accepted.

Interviewer: *In phys. ed. class or recess, do you think there are any issues socially where he just really doesn't feel like he is part of the group or he can't really communicate with others...in that environment, the physical environment?*

Mother: *Yeah, I would say that would be a really accurate portrayal. His inability to communicate, inability to jump in and be successful at something like a pickup game of basketball, you know, which just sort of automatically gets you into the recess mode when you are sort of with the group, and they are all playing soccer or playing dodgeball or all playing something...If you are not really particularly good or particularly funny or particularly something that makes you automatically part of the group, you shy off of that. And I'd say that is very definitely the case for Grant.*

Interviewer: *I think with anything, you gravitate to anything you are good at. So if he's good at reading or math or those type of subjects, he will put more emphasis and time to that, whereas if he doesn't experience a lot of success in more physical type activities he is bound to shy away.*

Mother: *Yeah. Yeah...When he pulls out the chess board he doesn't have any lack of partners to play at recess time so...*

This passage details the link between physical competence and feeling a sense of belongingness in physical activity. Because Grant lacks the physical competence and social skills to effectively communicate with other children, an aversion to physical activity and lack of meaningful connectedness to others in physical activity environments is highly probable. Grant has found that his competencies lie in more cerebral activities, like school work and chess. By excelling at the game of chess, Grant satisfies the need for both belongingness and competency. This point is illustrated as Grant is questioned about his drawings of a good day at recess (See Appendix Q).

Interviewer: *How do you feel when you play against these other kids?(at chess)*
Grant: *Pretty happy.*
Interviewer: *Pretty happy? what makes you happy?*
Grant: *Well uh...first of all uh...I am actually doing something with somebody else. I'm uh... it actually lets me know that I actually have some friends that I can actually play with. And apparently it tells me that I do have more friends that I think of at first.*

As the conversation progressed, Grant felt more comfortable sharing personal experiences and feelings regarding physical activity. Towards the end of the second interview, it seemed as though Grant wanted to talk about his feelings, and finally have a chance to share some of the experiences he had during school regarding physical education class and recess.

Interviewer: *Okay. Would it matter to you to have one really good friend to play with at recess or having someone in gym class?*
Grant: *It probably would yeah. Yeah.*
Interviewer: *Yeah, how would it make a difference?*
Grant: *Well first of all it would mean like I wouldn't always, I mean, first of all at recess, I wouldn't, I'd almost never be just sitting alone by my locker. And in physed it kind of helps having someone there so whenever we'd be in partners I could go with him.*
Interviewer: *Okay. When do you feel the most accepted or like by all of the other kids, or by the group?*
Grant: *Well actually for me, I have found that the only time is really in music class. For some reason it feels like I just fit in more and...I just feel more like part of the group when we are doing music, like in concert band or playing together.*
Interviewer: *When do you feel the least accepted, or not part of the group?*
Grant: *Umm...I would say more, namely more at recess time.*

Interviewer: *Why just at recess?*

Grant: *Well it's not just at recess, but more just, more of at recess. Well the first thing, we don't really have something that we have to be doing... well normally. We don't have to be doing anything and uh...there would normally be people doing stuff on their own and...I kind of feel left out.*

Interviewer: *Yeah. Kids do other stuff. Which do you like better, physed class or recess?*

Grant: *I like gym class better.*

Interviewer: *Why is that?*

Grant: *Well first of all I do feel like I am more accepted than at recess. Often, I mean in the last few months it has been really fun. Umm...yeah.*

Interviewer: *Okay. Do you think that if you were a better athlete or a faster runner, that you would feel like you were more part of the group?*

Grant: *Yeah, probably, yeah, definitely.*

Interviewer: *Why do you think that?*

Grant: *Well, I mean it would just feel better if I am actually doing better and everybody would really be encouraging me more. Plus also another thing that kind of came in... some kids were kind of teasing me about being kind of big, kind of chubby, and uh, it seems like almost all of them ended up going to the school that I go to now. And they kind of put it on to everybody else so (the teasing).*

Even though the topic of conversation was geared towards physical activity, when asked when he feels like he is most accepted by the group, Grant answered "*in music class*". It is obvious that Grant does not see the physical activity environment as a place to build lasting and meaningful friendships. Due to several moves and changes of schools, as well as the social stigma and physical limitations of obesity, Grant has not had a positive experience in physical activity. His belongingness needs and the need to feel competent do not appear to be met in typical physical activity environments (i.e., physical education class and recess), so Grant concentrates his efforts on academics and more sedentary games. In these activities, Grant receives the reinforcement and praise he fundamentally desires, and seems likely continue down that same road into the future.

Participant #5: Mark

Individual Characteristics. Mark is an eleven-year-old boy who has two older brothers, and one younger sister. Before the actual interviews began, Mark's mother called to say that he was very nervous about being interviewed. He knew the discussion would involve physical activity and possibly obesity, and was not sure if he wanted to continue with the interview. Although his mother constantly reassured Mark, upon arriving at his house, the stress was visible in Mark's low voice and overall body language. Although shy and hesitant at first, toward the end of the first interview, and throughout the second interview, Mark opened up and shared many feelings and experiences about physical activity and his obesity.

From the start, Mark's mother told me that she and her son had a special bond, and frequently discussed issues and feelings regarding Mark's obesity. Whereas some children do not recognize or acknowledge the fact that they are obese, Mark was very sensitive to his current physical condition. Mark's mother also recognized the social and physical implications of obesity, and was very open in discussing her son's condition throughout the interview. Mark's mother shared some examples of how his obesity affects him in day-to-day situations.

Mother: *Well as he gets a little older of course he has more interest in how he is looking and how he is being received by his friends and adults.*
Interviewer: *About when did he...*
Mother: *About a year ago, when we first found out about Geoff's study. That kind of got us talking about it more so, and at that point he was ready to do something for himself.*
Interviewer: *Any other examples of him taking a conscious look at himself and kind of changing his outlook on himself?*
Mother: *Well going to buy clothing. There's that. His friends are all pretty well more along the 'normal' structure size so. I think there's that. And our children, we have them always take swimming lessons so that was always a big thing too going to the pool. And uh...showing himself in the water, and going to group lessons.*

Interviewer: *How does he react in that specific situation. How do you think he feels about that?*
Mother: *I think he tries to put on a brave front. We have made him go and do those things, he just puts on a brave front and just choke it up and go...take part.*

Where some overweight children do seem to care about others opinions of them, Mark is very sensitive to how others see him. Buying clothing or being put in situations where he has to expose his body (e.g., swimming lessons) causes Mark anxiety and embarrassment. His mother goes on to discuss how obesity has affected Mark during school.

Interviewer: *Has Michael ever come home frustrated or upset about anything that has happened at school?*
Mother: *Ummhmm. Well when he hasn't achieved as good as a result on a project or test, then he comes home unhappy. And he mentioned one episode this summer that happened in gym class where he was kind of being picked on and that was bothering him. And their health class they have been going through health with issues of body size and what this means and what that means and being pre-disposed to developing heart disease or diabetes and he has been coming home upset because the finger is being pointed at him that he's the one in class it's all being directed to.*
Interviewer: *Do you ever sit down and discuss with him, stuff like that about being upset. Has he ever come home really upset or does he kind of mention it in passing?*
Mother: *No that time he was upset about it and wanted me to speak with him on the side about what was bothering him and then kind of going through it.*
Interviewer: *Is that just been in the last little while?*
Mother: *Yeah, just this last year in grade 6.*
Interviewer: *I guess you mentioned before about him not wanting to take his shirt off and things, has that sort of thing been common or does that happen frequently?*
Mother: *Just in the last year or two, this has been the biggest he has been.*
Interviewer: *And before that it didn't really matter?*
Mother: *No, no.*

Interviewer: *So approximately what age did he start to realize...*

Mother: *Likely, maybe two years ago, he was about nine.*

This passage touches on the typical stages of cognitive development and self-awareness. At approximately nine years of age, Mark began to realize the social and physical effects of obesity: clothes not fitting properly, teasing from other children, and anxiety over taking his shirt of in public. It is common for children around the age of 8 or 9 to develop increased awareness of how others perceive them, and realize that they are often judged according to how others look and perform physically (Piaget, 1954). Accordingly, how children deal with others' judgements often affects which type of activity they choose to pursue (i.e., strength, endurance, speed, non-active or academics). During the first interview, Mark shared what worried him the most.

Interviewer:	*If you could pick one thing that you wouldn't have to worry about anymore, what would it be?*
Mark:	*Getting teased. Kids teasing me.*

Throughout the interview, Mark did not hide the fact that he was overweight, and that it bothered him in many situations. When asked the question indicated above, the first thing that Mark spoke of was getting teased. Mark talked about many instances where his obesity frustrated him, and caused hurt and anxiety in physical activity situations. Regardless of the negativity he has experienced, Mark remains active and enjoys the friendship and competition of physical activity.

Physical Activity. Mark is an active young boy, who enjoys participating in gym class and joining in the recess activity with his peers (which is usually football in the spring, and "mini-sticks" hockey in the winter). The following excerpt details some of Mark's perceptions regarding physical education class and recess.

Interviewer:	*What are some of your favorite things about gym?*

Mark: *Umm…the sports that we play and…some of the games that the teacher picks for us are really fun.*

Interviewer: *Okay, what are some of your favorite things about recess?*

Mark: *We get to go outside which is good. And you get to choose what games you want to play.*

Interviewer: *Usually in sports there are competitive games which is one team against another, or there are sports that are individual, just playing by yourself, or cooperative, kind of one big team. What is your favorite kind of sport?*

Mark: *I like competitive.*

Interviewer: *You like trying to beat someone else?*

Mark: *Yeah.*

Interviewer: *Do you like doing that by yourself or by being part of a team?*

Mark: *I like being part of a team. Because usually we kind of have to play on a team that like has a lot and you can make better plays and everybody isn't always looking just at you.*

Interviewer: *What do you think is the biggest difference between gym class and recess?*

Mark: *In physed we, the teachers emphasizes, well not everybody's talent, but more sportsmanship. And in recess, there is not really a teacher there to supervise so, if you make a bad play or there is usually more fights or, kids insulting other kids and stuff.*

Interviewer: *Does that ever happen in physed class?*

Mark: *No, because the teacher is there the whole time.*

Interviewer: *Yeah, okay. Which do you like better, gym class or recess?*

Mark: *I kind of like gym class better.*

Interviewer: *Yeah, why is that.*

Mark: *There are usually games that I like to play, and because like I said, there is no teasing or anything like that.*

In this part of the conversation, Mark expresses what he finds appealing in both physical education class and recess. Recess is enjoyed because it is time spent outdoors, and there is freedom to choose the activity you want to play. On the other hand, Mark enjoys the new games, the focus on sportsmanship, and the overall presence of the instructor in physical education class. Since Mark has previously been ridiculed about his weight at recess, having the instructor present allows him to participate without the fear of being teased by other children. Mark also states that he prefers competitive team sports, where "*everybody isn't always looking just at you*".

Physical Competence. Mark's recess and physical education experiences have been greatly influenced by his obesity and physical competence. Knowing that his size limits the type of activity he can participate in, Mark has gravitated towards certain activities, and away from others.

Mark: *In gym class, we just started gymnastics, and umm…I am not really good at that. Kind of learning, and it seem like all of the other kids are already really good at it.*
Interviewer: *What makes a bad day in gym class bad?*
Mark: *Ummm…like…in gymnastics we have to like, do a routine in front of everyone. I don't know, I didn't do good so.*
Interviewer: *Why don't you think you did very good?*
Mark: *I couldn't do most of the stuff really.*
Interviewer: *And you had to do it in front of everyone else?*
Mark: *Yeah.*
Interviewer: *How did that make you feel having to do that in front of everybody else?*
Mark: *I don't know, like they were better than me kinda.*
Interviewer: *Did it make you want to stop, or did it make you want to try harder?*
Mark: *Umm…kinda made me want to stop.*

Mark's inability to perform certain gymnastics activities, as well as having to perform in front of his classmates, has made him not want to participate in that activity. Mark's reluctance or withdrawal from certain activities seems to not only depend on his competence level, but also on the likelihood of being ridiculed.

Interviewer: *Okay. When people get teased or when you get teased, does it make you want to stop?*
Mark: *Sometimes. If I get teased about not being able to catch something, I will try harder to catch it. But if it is like about how big I am I usually don't like to play anymore.*

It appears that in certain circumstances (e.g., dropping a football catch), Mark can tolerate being criticized about his physical ability. When it becomes personal, such as when it has to do with his physical appearance, Mark prefers to withdraw from that activity. Activities where there is greater visibility (e.g., swimming) and awkward positioning of the body (e.g., gymnastics) and therefore more potential for ridicule, are the activities that Mark dislikes the most. The visibility of obesity is difficult to conceal in gymnastics and swimming, while even the best athletes "drop the ball" occasionally.

Similar to all other participants in this study, Mark expressed the desire to run faster. Even though Mark participates in the games and understands the strategies involved, he feels the ability to run faster would be a definite asset.

Interviewer: *What would you like to be really good at doing?*
Mark: *Running.*
Interviewer: *Running? Fast running or long distance running?*
Mark: *Probably fast running. Like in most sports it is better to be faster and the fast kids are really good.*
Interviewer: *Yeah. How are you right now?*
Mark: *Uhh...well I could be really fast, like sometimes I think I run really fast but I don't know, I guess compared to the other kids I maybe am average...closer to the bottom.*

The physical activities that Mark has been drawn to are those in which speed and physical endurance are not a factor. The sport Mark predominantly spoke about was hockey, where his position is usually goalie. In his after-school hockey league, during recess playing "mini-sticks", or during floor hockey in physical education class, Mark takes the position of goalie. As mentioned previously, the position of goalie usually relies more on reflexes and positioning, rather than endurance, running speed, or overall strength. The next paragraph reveals why Mark feels he is a good goalie, as well as further reasons he feels he is a good athlete.

Interviewer: *Why do you think you are a good athlete?*
Mark: *Because I encourage people, I am a team player, I am good strategically, ummm...I don't know, I have good reflexes.*
Interviewer: *Yeah, that helps being a goalie.*
Mark: *And...I don't know, I am pretty strong, and I am pretty quick for my size so...*

Mark chooses to focus on his strengths as an athlete, *"encouraging, team player, strategic, strength, and quickness"*, all skills that you do not have to be thin to attain. By using these skills to his advantage, Mark has experienced much success in physical education and recess, in spite of his obesity.

Belongingness. Having a number of friends and feeling accepted by his peers is very important to Mark. Knowing that he cannot participate very well in some activities, Mark's shares an instance when his friends changed activities to prevent him from feeling left out.

Interviewer: *So you think some kids play sports just because they kind of have to because their other friends are?*
Mark: *Well, yeah. Because we have a big group of boys that are in my class who always play at recess. Like some sports I don't like as much like soccer, but, I still play because I don't really have anything else to do, except play with my friends.*
Interviewer: *Do you ever feel like you have to play sports you don't really want to play, just because your other friends are playing?*
Mark: *I enjoy everything, but sometimes just because like I have like three friends are mine that are my best friends, and I hang out with them a lot and, they will usually do what I want to do if I don't want to do something.*

This point is also illustrated in Mark's drawing of a "Bad day at Recess" (See Appendix X). Mark explains a negative situation, but goes to state how his friends make him feel accepted in the end.

Interviewer: *Okay. Lets go on to the next picture, can you tell me what is going on here.*
Mark: *We have this really tall monkey bars and there is like a little bridge here. And people like jump off it and get on top, and I can't really do that, and so. Everybody like in the summer goes to the park and they just get up there and talk and stuff, and I am just kind of on the bottom.*
Interviewer: *Yeah. Do you kind of feel left out a little bit?*
Mark: *Yeah.*
Interviewer: *Do kids ever say anything about that?*
Mark: *Mmmm...some of them, I don't know, try and show me how to get up and stuff.*

Interviewer: *So if you could put feeling into this picture, what are you feeling at that point?*
Mark: *Mmmm...kind of left out, kind of lonely a little, umm...I don't know.*
Interviewer: *What do you think the other kids are feeling?*
Mark: *Umm...well, some of them are encouraging me to get up...I don't know, other may be like...kind of like being mean to me cause I can't get up there.*
Interviewer: *What kind of stuff do they do...or say?*
Mark: *They say kind of stuff like that.(pointing to what he had written by the picture)*
Interviewer: *(reading off of Michael's picture) "Come on you can't even get up here". Is there anything you would change about this picture now, or anything else that would make a bad day at recess?*
Mark: *Well something that would make this day better would be like, sometimes some kids will like come down and they will start to play something different. And usually my friends see I am not going up there and then they won't go up there either.*

Mark's "good days" in recess and physical education also revolve around the idea of being accepted by his peers. Appendix U and V both show Mark scoring a goal playing hockey or mini-sticks. When asked why this was a good day, Mark responded, "*Because I got a compliment. Because I am part of the team*".

The link between belongingness and physical competence is also prevalent in the way Mark experiences most sports and activities. In young boys, being competent at sports is often directly associated to social status (Chase & Dummer, 1992). This point was qualified in the second interview with Mark.

Interviewer: *Do you think you have to be good at certain sports to get friends then?*
Mark: *Yeah, cause like people who are like the best at sports are the most popular kids.*
Interviewer: *Hmmm that is interesting.*
Mark: *And so I stick to sports that I am really good at, and then I play with my friends and stuff. But then I guess for that time I would rather be with my friends because then I feel more popular because everybody will talk to you. So that makes me feel a lot better.*

In an attempt to feel more accepted or *"popular"*, Mark chooses to participate in activities where he feels comfortable and competent physically. For example, choosing to be goalie, or other activities where Mark can display his strength or quick reflexes.

In general, it seems that Mark has gravitated towards the sports and activities which provide social and physical success, thus satisfying both competence and belongingness needs. Like the other participants in the study, Mark's obesity limited the number of physical activities he could confidently participate in. Relying on his strength and reflexes, Mark showed an interest in being a goalie, and tried to avoid activities such as soccer and gymnastics. Fortunately, Mark has a close group of friends who not only share interest in the same sports, but assist or stop playing in sports Mark does not feel comfortable playing.

CHAPTER 5

General Discussion of Children's Experiences

The purpose of this study was to examine the lived experience of late elementary school boys with obesity in physical activity settings. It was hypothesized that both recess and physical education class would generate some feelings of exclusion and anxiety for these five obese boys, thus influencing social interaction, activity choice, and overall perceptions of physical activity. Physical competence, severity of obesity, individual circumstances, as well as general personality traits were all considered to influence how these children experienced physical education class and recess. In this chapter, commonalties across all participants, as well as their differences will be discussed according to the themes of belongingness, loneliness, and physical competence.

Belongingness

Research has shown that people have a fundamental motivation to create lasting, meaningful bonds with others throughout their lives (Baumeister & Leary, 1995). Children who are rejected, or do not establish or maintain these bonds are more prone to experience feelings of loneliness and social dissatisfaction, affecting health, behavior, and overall well-being (Asher et al., 1990; Baumeister & Leary, 1995). The more sedentary lifestyle of obese children has been shown to affect the development of motor skills, physical fitness, as well as social relationships in physical activity settings (Berkowitz, Agras, Korner, Kraemer, & Zeanah, 1985; Marshall & Bouffard, 1997). It was hypothesized that a lack of belongingness, or loneliness would be a major concern for the five participants in this study, especially in the area of physical activity. It was found that individual differences and personality traits in each child affected their sense of belongingness in physical activity settings to some degree. Moreover, each child had different feelings and perceptions of belongingness based on the physical activity setting.

Each participant's sense of belongingness at recess and during physical education class seemed to depend upon a variety of factors. As hypothesized, the presence of an instructor for supervision, structure, and organization was a relevant factor for three of the five children. The freedom to choose the type of activity in which that child feels most accepted (i.e., during recess) was also revealed as influential.

In the case of the five participants in this study, it is possible that their belongingness needs are satisfied in environments other than ones based on physical activity. A child may feel rejected during certain physical activities, but regain a sense of belongingness in other social or academic settings. Each child in this study had an affinity for scholastics and was doing well in other academic subjects. With the exception of Wade, all of the children were honor students and spoke highly of pursuing academia in the future. Perhaps by accepting that their obesity does not allow them to succeed at satisfying their belongingness and competence needs in the physical arena, the children focus on more academic pursuits. Attaining high grades in school often warrants praise from teachers and peers, wins individual awards, and gives special privileges. All of these contribute to perceptions of belongingness. Although social popularity at this age may coincide more with athletic achievement, academic success also holds a degree of prestige and worth to children (Chase & Dummer, 1992).

In total, three out of the five participants preferred physical education classes over recess. The common reasons for this choice were the novelty of the games, and the structure and fairness provided by the instructor. These three children, Wade, Eric, and Mark, preferred team activities, which are common in elementary physical education classes. Mark also felt a stronger sense of acceptance due to the fact that the presence of the instructor deters teasing and insults from other children. All three participants felt that recess games or activities had more possibilities for exclusion or rejection. During recess, as examples, Eric disliked the possibility of unevenly matched teams, and Mark recalled a greater chance of others teasing or ridiculing him because of his weight.

The other two children, Craig and Grant, stated a preference for recess over physical education classes. Grant, who did not seem to hold any value for physical activity, enjoyed recess because he could play chess with other children, giving him more opportunities to interact and feel more accepted than during physical education. Craig, on the other hand, felt that he was being singled out and picked on by his physical education instructor, which seemed to negatively affect his sense of belongingness in that setting. Although each child had different reasons for preferring recess or physical education, all five were partially motivated by the need to feel accepted by their peers.

Previous research has shown that children with obesity are often prone to discrimination and avoidance from others (Goffman, 1963), and are consistently ranked last according to overall likeability or intentions of friendship (Maddox et al., 1968; Richardson et al., 1961). Generally, this was not the case for the participants in this study. In fact, the opposite was shown in Mark's example of how his friends actually stopped the activity they were doing (climbing on an outdoor apparatus) in order for

Mark to continue to play with them. Even Grant, who did not join in many outdoor recess activities, had a select group of children who played chess with him at recess. Although there was some mention of social criticism and teasing, all participants basically had a group of friends who they could rely on to consistently associate and play with.

Loneliness

A common result of belongingness needs not being satisfied is feelings of rejection or loneliness (Baumeister & Leary, 1995; Page et al., 1994). Weiss (1973) has proposed there are two types of loneliness: social loneliness, or not feeling like part of the group, and emotional loneliness, or lacking a close interpersonal attachment with another person. Although an obese child may feel socially lonely due to rejection at recess or in physical education class, he or she may still have a close friend to satisfy the need to feel accepted. Mark, for example, experienced social loneliness in cases where he was teased, or could not participate in a group activity, but counteracted this feeling by playing with one or two of his close friends in another activity. This may also be the case for the other participants. Feeling unaccepted by "the group" in certain physical activities may be relieved by playing a separate game, or finding another group of friends to play with. This suggests that even the presence of one other person with whom a meaningful relationship can be formed may alleviate feelings of loneliness.

A contributing factor to feelings of loneliness in children is being routinely rejected by peers or playmates (Bullock, 1993). As discussed in Chapter 2, Asher and Wheeler (1985) have identified unpopular children who experience exclusion by others as rejected (i.e., actively disliked by peers and lack friends in class) or neglected (i.e., reasonably well liked even though they lack close friends in their class). Having few friends and being widely disliked by the peer group (rejected) leads to feelings of loneliness and social dissatisfaction (Asher et al., 1990). In this study, the only indication of neglect or rejection during physical activity was reported by Grant. Through examples given throughout the interviews, as well as in his picture of a "bad day at recess" (see Appendix T), Grant never mentioned having a close friend to spend time with during recess and physical education, and seemed to be actively excluded by his peers. Being rejected by his peer group suggests that Grant experiences greater feelings of loneliness and social dissatisfaction than the other participants during physical education and recess. The other four participants all stated having "close" or "best" friends to associate or play with during physical education class and recess, and did not exhibit signs of feeling rejected or neglected.

Page et al. (1992) have suggested that loneliness is often associated with a decrease in physical activity children. By lacking the physical and/or social skills to meaningfully interact in physical environments, children may be excluded and withdraw from certain activities and games, thus further contributing to reduced physical activity, peer rejection, and poor social interactions. Grant's withdrawal from physical activity at recess, evidence of peer rejection, and a lack of social interaction with other kids supports the research by Page et al. (1992) and suggests that he may be experiencing feelings of loneliness during physical education class and recess. The other children in the study, who were more physically skilled than Grant, did not express feelings of loneliness, and therefore increased their chances of having positive experiences in physical activity settings.

Physical Competence

Research has shown that physical competence and athleticism are more important than academic achievement in establishing popularity in boys grades 4 to 6 (Buchanan et al., 1976; Chase & Dummer, 1992). In addition, Asher et al. (1977) have suggested that increased social status and positive peer relations are often gained by being good at something other children value. For all five participants in the present study, physical competence was the most commonly mentioned factor in determining peer acceptance, social status, and feelings of self-worth in physical activity settings, regardless of individual skill level.

The most common and valued aspect of physical competence was the ability to run fast. Each child was asked at some point what makes someone a good athlete, or to identify what would make him become a better athlete. All five participants answers included the ability to run faster. Understandably, being able to run faster gives you a definite advantage in most physical activities, sports, and games played by this age group, including soccer, football, tag, dodgeball, track and field, etc. With the ability to run fast comes an increased chance of success, or winning, in many competitive activities. Since athleticism and winning are highly valued by young boys (Chase & Dummer, 1992), the ability to run fast may effectively increase social status and peer acceptance. For the participants in this study, the chance of being the fastest runner among their peers is unlikely or impossible (at least in the near future).

It was initially presumed that the participants would have negative perceptions of belongingness and social acceptance in physical education class and at recess, due to the lack of movement competence associated with obese children. Each child spoke of the desire to run faster to make them a better overall athlete, but four out of the five children reported that they did feel connected or positively associated with their peers during most physical activities. Although running faster may have brought them increased popularity and social status, the children chose to focus on the skills or talents in which they could display competence. They chose sports, or roles within sports, where they could feel successful and competent as an athlete. For example, Mark and Eric both talked about their successes as goalies, for a hockey team and handball team respectively. Craig and Grant expressed interest in wrestling, where a person can use their size and strength as an advantage. Craig also mentioned his participation in "rougher" sports where again he felt he was physically at an advantage. Wade focused on the game of dodgeball, where having a strong and accurate throwing arm, allowed him to find success. Overall, each participant displayed competence in specific activities that their obesity did not significantly affect, and may even have helped. By satisfying the need to feel competent, each child was also able to somewhat satisfy the need to feel belongingness or acceptance from their peer group.

Children who do not possess socially acceptable levels of movement competency may be excluded or given roles that provide fewer opportunities to interact with others (Shoemaker & Kalverboer, 1994). Many of the roles the participants in this study assumed roles that were less social and inactive (e.g., goalie). Although not necessarily the best athletes, by achieving success and recognition in specific roles or activities, the participants were able to perceive increased peer status. It is possible, therefore, that physical competence and belongingness are sport and/or skill specific for the children. Displaying physical competence at one or two specific sports, or even one or two specific skills, may be enough to gain the amount of social status or popularity needed to satisfy the need for belongingness. All of the children in this study, except Grant, expressed a sense of connectedness to specific others, and to the overall group during physical education class and recess. With the exception of certain sports or activities, in which obesity was physically restraining, four of the five participants used specific aspects of their skill repertoire to display physical competence and feel more accepted in physical activity environments.

Research has suggested that obese children tend to have less positive self-perceptions of physical competence than nonobese children (Braet et al., 1997). It was initially expected that the participants in this study would not be physically active, have lower perceptions of physical competence, and devalue physical activity because of their obesity. Surprisingly, it was found that only one child (Grant) had less positive self-perceptions of competence, and did not put high value in achieving success in physical activity. Grant indicated that he does not enjoy physical education, and that he prefers chess and reading at recess over going outside with the other children. The nature of the interview questions prompted Grant to talk about sports and physical activity, but when asked about general strengths and preferences, there was a definite focus on academics. Grant wanted to be a faster runner and better athlete overall, but was more concerned with performing well at school and being competitive in recess games of chess. By not placing much value in physical activity, Grant does not have to feel excluded or rejected while other children are playing sports during recess.

Grant's personal history may have contributed to his poor social skills, lack of physical ability and his obese condition. Grant has frequently moved from school to school throughout his elementary years, making it difficult to build any long-term, meaningful relationships with his peers. Poor motor skills, decreased enjoyment, and lack of social support are all associated with withdrawal from physical activity (Bouffard et al., 1996). Decreased opportunities to maintain lasting friendships and develop social skills, and having been relatively overweight since he was a young child (according to his mother), have all seemed to contribute to Grant's current situation.

Eric seemed to devalue *competitive* physical activity and maintained that he participated purely for the "fun of it". By not placing pressure on himself to perform at the same level as nonobese children, Eric can participate in most activities and still feel a strong sense of belongingness. Although his "just for the fun of it" attitude was consistent with his parents' attitudes towards physical activity, Eric did report a desire to be a faster runner, and an overall better athlete. Here it seems that there is a struggle between the values set forth by his parents, and the desire to gain acceptance and feel competent at physical activity that is typical of someone Eric's age and gender.

Results indicated that certain activities were more facilitative to participation, while others were conducive to isolation and withdrawal. Whereas running was a skill that each child valued, an activity that was devalued or disliked by all five participants was gymnastics. Elementary gymnastics often involves flexibility, jumping, rolling, and supporting one's own or another child's body weight. These tasks are difficult for obese children and are often performed in front of others, thereby increasing the likelihood of ridicule, embarrassment, and decreased self-confidence. Basically, gymnastics is not an activity that is conducive to perceptions of belongingness or physical competence for children who are obese.

Other activities or factors that promoted exclusion, ridicule, or withdrawal were those in which the children were allowed to choose the teams. Mark and Eric both shared feelings of embarrassment or exclusion after being picked last or being put on the less skilled team during group activities at recess. Being picked last, or close to last affects perceived competence and belongingness, and may lead to withdrawal from some unstructured physical activity.

CHAPTER 6

Conclusions

It was expected that the negative social perception of obesity, in combination with decreased movement competence, would result in specific instances of exclusion, ridicule, and withdrawal from physical activity. As predicted, it was revealed that all of the obese children in this study were exposed to some teasing and ridicule, were excluded or made to feel unwanted, and withdrew from many school games or sports. These findings, although expected were rather disheartening. On the other hand, the findings of resilience and adaptation were surprising and triumphant. Each participant in this study found sports or activities in which they could compete and excel at, based on their own individual talents and skills, and in spite of their obesity. Demonstrating specific athletic ability increased the participants' perceptions of social acceptance, and likely contributed to an overall sense of belongingness and physical competence. Moreover, four of the five children were quite involved in sports and physical activity, regardless of the teasing and physical limitations associated with their obesity.

Overall, all of the participants except Grant seemed to have some positive experiences in physical activity. Differences in the preference for physical education classes or recess were expected because of individual perceptions, needs, and past experiences. Common traits across all participants were the dislike of gymnastics and the desire to be able to run faster. Generally, physical competence was found to be the most important factor in determining social success and feelings of belongingness in both structured and unstructured physical activity settings. Making meaningful contributions by demonstrating strength, precision, or hand-eye coordination allowed all of the participants to experience some degree of success in physical activity settings. Results from this study indicate that obesity did not necessarily prevent the participants from having a positive experience during physical education classes or recess. Although they may have to deal with social and physical barriers that many other children will never experience, the findings suggest that young boys with obesity may still be able to lead a positive and successful life in the physical activity environment. On the other hand, Grant's experience suggests that boys with severe obesity do not have a positive experience and are therefore at a greater risk of withdrawal from physical activity.

In terms of methodology, completion of a pilot study, use of semi-structured interview questions, interviews with both parent and child at the child's home, and the follow-up interview all contributed to the effectiveness of the data collection. More specifically, interviews with both the parents and child proved to be an effective means of obtaining a comprehensive, holistic overview of each participant. The semi-structured nature of the questioning allowed the interview to be more flexible, and gave the researcher opportunities to ask specific questions around topics of interest. By transcribing the parent interview and initial child interview immediately after they were completed, follow-up questions were established to guide the second interview with the child. In addition, the importance of a pilot study can not be underestimated. The completion of the pilot study unquestionably increased the quality of the data collected in that it allowed me to evaluate the quality or effectiveness of the planned interview questions, as well as my personal interview skills. Reviewing and evaluating the pilot study videotapes resulted in the identification of inadequate and confusing questions, revealed whether timely and effective follow-up questions were asked, and also revealed deleterious interviewer behaviours such as a tendency to interrupt the interviewee. Finally, the participant drawings were a useful tool to uncover specific instances of peer rejection, loneliness, and personal preference for specific physical activity.

The usefulness of the qualitative research approach selected to study the questions of interest in this study also deserves comment. The method used provided the opportunity for children to reveal what is important to them in their own personal experiences in structured and unstructured physical activity. It enabled me to build a comprehensive picture of each individual, revealed the particular factors that influenced each boy's experience, and revealed the complexities of the interrelationships among these factors. The value of obtaining data in this manner is also that it allows participants to freely express themselves, and not feel limited to commenting on only the factors assumed to be important by, or of particular interest to, the researcher. The result is a product that is rich with stories and phrases that illustrate the experiences of the individual participants, to be understood, interpreted, and shared with the rest of the world.

Further research focusing on the effects of the differential levels (or severity) of obesity, weight, and age on the experiences of obese boys in physical activity may help to answer some questions that have been left unanswered. Future research may want to include observations of children during recess and physical education classes. This would allow the researcher to develop a better sense participants' physical competence, and provide an opportunity to ask participants specific questions about the observed events. Small focus groups with other obese children may be an alternative to individual interviews. Ensuring a safe and supportive environment, a small group conversation may give children the opportunity to share similar experiences with one another. Future research in this area will not only increase our knowledge of childhood obesity, but also broaden our understanding of how we as instructors, researchers, and parents can make an effective difference in the quality of life for obese children.

References

Allon, N. (1975). The stigma of overweight in everyday life. In G. A. Bray (Ed.), *Obesity in Perspective*. Vol. 2 (pp. 83-102). Washington, DC: U.S. Government Printing Office.

Asher, S. R. (1990). Recent advances in the study of peer rejection. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 253-273). New York: Cambridge University Press.

Asher, S. R., & Hymel, S. (1981). Children's social competence in peer relations: Sociometric and behavioral assessment. In J. D. Wine & M. D. Smye (Eds.), *Social competence* (pp. 125-157). New York: Guilford.

Asher, S. R., Oden, S. L., & Gottman, J. M. (1977). Children's friendships in school settings. In L. G. Katz (Ed.), *Current topics in early childhood education* (pp. 33-61). Norwood, NJ: Ablex.

Asher, S. R., Parkhurst, J. T., Hymel, S., & Williams, G. A., (1990). Peer rejection and loneliness in childhood. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 253-273). New York: Cambridge University Press.

Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology, 53,* 500-505.

Baumeister R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117,* 497-529.

Berkowitz, R., Agras, W., Korner, A., Kraemer, H., & Zeanah, C. (1985). Physical activity and adiposity: A longitudinal study from birth to childhood. *Journal of Pediatrics, 106,* 734-738.

Bierman, K. L. (1983). Cognitive development and clinical interviews with children. In B. B. Lahey & A. E. Kazdin (Eds.), *Advances in clinical child psychology* (pp. 217-250). New York: Plenum Press.

Blinde, M. E. & McCallister, S. G. (1998). Listening to the voices of students with disabilities. *Journal of Physical Education, Recreation, and Dance, 69,* 64-68.

Bogdan, R. C., & Biklen, S. N. (1992). *Qualitative research for education: An introduction to theory and methods.* Boston, MA: Allyn and Bacon.

Boggs, S., & Eyberg, S. (1990). Interview techniques and establishing good rapport. In A. M. Greca (Ed.), *Through the eyes of the child: Obtaining self-reports from children and adolescents* (pp. 85-108). Boston, MA: Allyn and Bacon.

Bouffard, M., Watkinson, E. J., Thompson, L. P., Causgrove Dunn, J. L., & Romanow, S. K. E. (1996). A test of the activity deficit hypothesis with children with movement difficulties. *Adapted Physical Activity Quarterly, 13,* 61-73.

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment.* New York: Basic Books.

Braet, C., Mervielde, I., & Vandereycken, W. (1997). Psychological aspects of childhood obesity: A confrontational study in a clinical and nonclinical sample. *Journal of Pediatric Psychology, 22,* 59-71.

Brooks, G. A., Fahey, T. D., & White, T. P. (1996). *Exercise Physiology: Human Bioenergetics and Its Applications (2nd ed).* Mountain View, CA: Mayfield Publishing Company.

Buchanan, H. T., Blankenbaker, J., & Cotten, D. (1976). Academic and athletic ability as popularity factors in elementary school children. *Research Quarterly, 47,* 320-329.

Bukowski, W. M. & Hoza, B. (1989). Popularity and friendship: Issues in theory, measurement, and outcome. In T. J. Berndt & G. W. Ladd (Eds.), *Peer relationships in child development* (pp. 15-45). New York: Wiley.

Bullock, J. R. (1993). Lonely children. *Young Children, 48,* 53-57.

Burton, B., Foster, W., Hirsch, J., & Van Itallie, T. (1985). Health implications of obesity: an NIH consensus development conference. *International Journal of Obesity, 9,* 155-169.

Buss, D. M., (1991). Evolutionary personality psychology. *Annual Review of Psychology, 42,* 459-491.

Chandler, L. A., & Johnson, V. J. (1991). *Using projective techniques with children: A guide to clinical assessment.* Springfield: Charles C Thomas.

Chase, M. A., & Dummer, G. M. (1992). The role of sports as a social status determinant for children. *Research Quarterly for Exercise and Sport, 63,* 418-424.

Cummings, J. A. (1986). Projective drawings. In H.M. Knoff (Ed.), *The assessment of child and adolescent personality* (pp. 199-244). New York: The Guilford Press.

Dejong, W. (1980). The stigma of obesity: The consequences of naïve assumptions concerning the causes of physical deviance. *Journal of Health and Social Behavior, 21,* 75-87.

Denzin, N. K. & Lincoln, Y. S. (1994). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds). *Handbook of qualitative research* (pp. 1-17). Thousand Oaks, CA: Sage Publications.

Dunbar, R., & O'Sullivan, M. (1986). Effects of differential treatment of boys and girls in elementary physical education lessons. *Journal of Teaching in Physical Education*, 5, 166-175.

Dunn, J. G. H. (1996). *An examination of the relationship between athletic ability, organized team sport participation, social satisfaction, and peer-group acceptance in elementary school children*. Sask. Sport Research Program.

Ellis, J. L. (1998). Narrative inquiries with children and youth. In J.L. Ellis (Ed.) *Teaching from understanding: Teacher as interpretive inquirer* (pp. 33-56). New York; Garland Publishing Inc.

Evans, J., & Roberts, G. C. (1987). Physical competence and the development of children's peer relations, *Quest, 39,* 23-35.

Frieze, I. H., Bar-Tal, D., & Carol, J. S. (1979). *New approaches to social problems*. San Francisco, CA: Jossey-Bass.

Galanaki, E. P., & Kalantzi-Azizi, A. (1999). Loneliness and social dissatisfaction: Its relation with children's self-efficacy for peer interaction. *Child Study Journal, 29,* 1-22.

Ginsburg, H. P. (1997). *Entering the child's mind: The clinical interview in psychological research and practice*. Cambridge, UK: University of Cambridge Press.

Goetz, T.E. & Dweck, C.S. (1980). Learned helplessness in social situations. *Journal of Personality and Social Psychology, 39,* 246-255.

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, N.J.: Prentice-Hall.

Goodman, N., Richardson, S., Dornbusch, S., & Hastorf, A. H. (1963). Variant reactions to physical disabilities. *American Sociological Review, 28,* 429-435.

Goodwin, D. L., & Watkinson, E. J. (2000). Inclusive physical education from the perspective of students with physical disabilities. *Adapted Physical Activity Quarterly, 17,* 144-160.

Graham, G. (1995). Physical education through students' eyes and in students' voices: Introduction. *Journal of Teaching in Physical Education*, *14,* 364-371.

Harter, S. (1982). The perceived competence scale for children. *Child Development, 43,* 87-97.

Hay, J., & Missiuna, C. (1998). Motor proficiency in children reporting low levels of participation in physical activity. *Canadian Journal of Occupational Therapy*, *65*(2), 64-71.

Kasser, V. G., & Ryan, M. R. (1999). The relation of psychological needs for autonomy and relatedness to vitality, well-being, and mortality in a nursing home. *Journal of Applied Social Psychology, 29,* 935-954.

Keys, A. (1955). Obesity and heart disease. *Journal of chronic diseases, 1,* 456-461.

Kimm, S. Y. S., Sweenwy, C. G., Janosky, J., & MacMillan, J. P. (1991). Self-concept measures childhood obesity: A descriptive analysis. *Developmental and Behavioral Pediatrics, 12,* 19-24.

Kleck, R., Ono, H., & Hastorf, A. H. (1966). The effects of physical deviance upon face-to-face interaction. *Human Relations, 19,* 425-436.

Kraft, R. E. (1989). Children at play: Behavior of children at recess. *Journal of Physical Education, Recreation and Dance, 60*(4), 21-24.

La Greca, A. M. (1990). Issues and perspectives on the child assessment process. In A. M. Greca (Ed.), *Through the eyes of the child: Obtaining self-reports from children and adolescents* (pp. 3-17). Boston, MA: Allyn and Bacon.

Langer, E. J., Taylor, S. E., Fiske, S., & Chantowitz, B. (1976). Stigma, staring, and discomfort: A novel stimulus hypothesis. *Journal of Experimental Social Psychology, 12,* 451-463.

Larson, R. W. (1990). The solitary side of life: An examination of the time people spend alone from childhood to old age. *Developmental Review, 10,* 155-183.

Lerner, R. M., & Korn, S. J. (1972). The development of body-build stereotypes in males. *Child Development, 43,* 908-920.

Maddox, G. L., Back, K., & Liederman, V. (1968). Overweight as social deviance and disability. *Journal of Health and Social Behavior, 9,* 287-298.

Malchiodi, C. A. (1998). *Understanding children's drawings.* New York: The Guilford Press.

Marshall, J. D., & Bouffard, M. (1997). The effects of quality daily physical education on movement competency in obese versus nonobese children. *Adapted Physical Activity Quarterly, 14,* 222-237.

Marshall, J. D., Hazlett, C. B., Spady, D. W., & Quinney, H. A. (1990). Comparison of convenient indicators of obesity. *American Journal of Clinical Nutrition, 51,* 22-28.

Maslow, A. H. (1968). *Toward a psychology of being.* New York: Van Nostrand.

Maxwell, J. A. (1996). *Qualitative research design: An interactive approach.* Thousand Oaks, CA: Sage.

Mendelson, B. K., & White, D. R. (1982). Relation between body-esteem and self-esteem of obese and normal children. *Perceptual & Motor Skills, 54,* 899-904.

Merrell, K. W. (1994). *Assessment of behavioral, social, & emotional problems: Direct and objective methods for use with children and adolescents.* New York: Longman.

Merriam, S. (1988). *Case study research in education: A qualitative approach.* San Francisco, CA: Josey-Bass.

Miller, A. G. (1970). Role of physical attractiveness in impression formation. *Psychonomic Science, 19,* 241-243.

Myers, A., & Rosen, J. C. (1999). Obesity stigmatization and coping: relation to mental health symptoms, body image, and self esteem. *International Journal of Obesity, 23,* 221-230.

Noles, S. W., Cash, T. F., & Winstead, B. A. (1985). Body image, physical attractiveness, and depression. *Journal of Consulting and Clinical Psychology, 53,* 88-94.

Page, R. M., Frey, J., Talbert, R., & Falk, C. (1992). Children's feelings of loneliness and social dissatisfaction: Relationship to measures of physical and activity. *Journal of teaching in physical education, 11,* 211-219.

Page, R. M., Scanlan, A., & Deringer, N. (1994). Childhood loneliness and isolation: Implications and strategies for childhood educators. *Child Study Journal, 24,* 107-118.

Page, R. M., & Tucker, L. A. (1992). *Exercise frequency and psychosocial functioning: An epidemiological study of 1,297 adolescents*. Manuscript submitted for publication.

Papleau, L. A., & Perlman, D. (1982). *Loneliness: A sourcebook of current theory, research, and therapy*. New York: Wiley.

Parkhurst, J.T. & Asher, S.R. (1992). Peer rejection in middle school: Subgroup differences in behavior, loneliness, and interpersonal concerns. *Developmental Psychology, 28(2),* 231-241.

Piaget, J. (1954). *The construction of reality in the child*. New York: Basic Books.

Pierce, J. W., & Wardle, J. (1997). Cause and effect beliefs and self-esteem of overweight children. *Journal of Child Psychology and Psychiatry, 38,* 645-650.

Pellegrini, A. D. (1995). *School recess and playground behavior: Educational and developmental roles*. State University of New York Press.

Pellegrini, A. D., & Bjorklund, D. F. (1997). The role of recess in children's cognitive performance. *Educational Psychologist, 32,* 35-40.

Portman, P.A. (1995). Who is having fun in physical education classes? Experiences of sixth-grade students in elementary and middle schools. *Journal of Teaching in Physical Education, 14,* 445-453.

Rand, C. S. W., & Macgregor, A. M. C. (1990). Morbidly obese patients' perceptions of social discrimination before and after surgery for obesity. *Southern Medical Journal, 83,* 1390-1395.

Reid, G. (1989). Ideas about motor behavior research with special populations. *Adapted Physical Activity Quarterly, 6,* 1-10.

Richardson, S., Goodman, N., Hastorf, A. H., & Dornbusch, S. (1961). Cultural uniformity in reaction to physical disabilities. *American Sociological Review, 26,* 241-247.

Rodin, M., Price, J., Sanchez, F., & McElliot, S. (1989). Derogation, exclusion, and unfair treatment of persons with social flaws: Controllability of stigma and the attribution of prejudice. *Personality and Social Psychology Bulletin, 15,* 439-451.

Rose, B., Larkin, D., & Berger, B. G. (1997). Coordination and gender influences on the perceived competence of children. *Adapted Physical Activity Quarterly, 14,* 130-140.

Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing: The art of hearing data.* Thousand Oaks, CA: Sage Publications.

Russell, D., Cutrona, C. E., Rose, J., & Yurko, K. (1984). Social and emotional loneliness: An examination of Weiss's typology of loneliness. *Journal of Personality and Social Psychology, 46,* 1313-1321.

Ryan, M. R., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist, 55,* 68-78.

Seidman, I. E. (1991). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. Columbia University: Teachers College Press.

Shoemaker, M. M., & Kalverboer, A. F. (1994). Social and affective problems of children who are clumsy: How early do they begin? *Adapted Physical Activity Quarterly, 11,* 130-140.

Silver, R. (2001). *Art as language: Access to thoughts and feelings through stimulus drawings*. Philadelphia, PA: Psychology Press.

Silverman, D. (1997). The logics of qualitative research. In G. Miller & R. Dinwall (Eds.), *Context and method in qualitative research* (pp. 12-25). Thousand Oaks, CA: Sage Publications.

Skinner, R. A., & Piek, J. P. (2001). Psychosocial implications of poor motor coordination in children and adolescents. *Human Movement Science, 20,* 73-94.

Staffieri, J. R. (1967). A study of social stereotype of body image in children. *Journal of Personality and Social Psychology, 7,* 101-194.

Stone, W., & Lemanek, K. (1990). Developmental issues in children's self- reports. In A. M. Greca (Ed.), *Through the eyes of the child: Obtaining self-reports from children and adolescents* (pp. 18-56). Boston, MA: Allyn and Bacon.

Strauss, C. C., Smith, K., Frame, C., & Forehand, R. (1985). Personal and interpersonal characteristics associated with childhood obesity. *Journal of Pediatric Psychology, 10,* 337-343.

Thompson, J., Jarvie, G., Lahey, B., & Cureton, K. (1982). Exercise and obesity: Etiology, physiology, and intervention. *Psychological Bulletin, 91,* 55-79.

Wadden, T. A., Foster, G. D., Brownell, K. D., & Finley, E. (1984). Self-concept in obese and normal-weight children. *Journal of Consulting and Clinical Psychology, 52,* 1104-1105.

Wankel, L. M., & Kreisel, S. J. (1985). Methodological considerations in youth sport motivation research: A comparison of open-ended and paired comparison approaches. *Journal of Sport Psychology, 7,* 65-74.

Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation.* Cambridge: MIT Press.

Weiss, M., & Duncan, S. (1992). The relationship between physical competence and peer acceptance in the context of children's sport participation. *Journal of Sport & Exercise Psychology, 14,* 177-191.

Wright, E. J., & Whitehead, T. L. (1987). Perceptions of body size and obesity: a selected review of the literature. *Journal of Community Health, 12,* 117-129.

Appendix A

Interview Checklist

Skill	Definition	Example
Acknowledgement	A verbal or non-verbal behavior that has little or no manifest content.	"Mm-hmm" Head nod Smile
Descriptive Statement	A non-evaluative comment that describes the present situation.	"That boy is playing by himself" "You look like you are thinking hard about that"
Reflective Statement	A statement that repeats what the child has said.	"It sounds like soccer is your favorite sport"
Praise statement	A statement that expresses explicit positive evaluation.	"You are good at describing your recess" "You answered that question really well"
Question	An expression of inquiry made to elicit information. Can be open-ended or closed-ended.	"Tell me what is going on in this picture?" "Which do you like better, gym class or recess?"
Command	An instruction in declarative form.	"Tell me more about that"
Summary Statement	A condensed reiteration of preceding content.	"So soccer and tag are your favorite things to do at recess"
Critical Statement (To be avoided)	A statement that expresses disapproval.	"You shouldn't do things like that" "I don't understand what you are saying"

(Boggs & Eyberg, 1990, p. 88)

Appendix B

Parent Interview Schedule

1. As _____ has gotten older, would you say he has changed a lot or stayed the same?
2. How would you say that _____is different from brothers or sisters, or friends?
3. What does______ do when he can't figure something out right away?
4. Would you say that _______ is good at getting his way? At home or in school?
5. Is ______ ever the one to initiate activities with friends?
6. Has ______ ever surprised you with his capabilities, or initiative, or staying power?
7. Has ______ever done anything else that was extremely difficult, or complicated or required endurance?
8. Does _______ have any unusual or interesting aspirations, plans or dreams?
9. Do you think ______ is aware or the idea of willpower or that he ever uses it?
10. Sometimes children surprise us with their depth of understanding or how much they know about things. Does ______ ever make comments or ask questions that surprise you in that way?
11. Most kids usually have preoccupations about one thing or another. What would you say are ______'s.
12. What is ______ most curious or fascinated with?
13. What kinds of things does______ find easy to do or hard to do?
14. Whenever ______ is really excited to tell you about something, what is it usually about?
15. Are there any older children or adults______ likes to spend time with? What do they do or talk about together?
16. Has ______ ever come home frustrated or upset about anything that has happened at school?
17. Does ______ share any experiences with you about sports or activities he plays in gym class or at recess?

18. What kind of sports, or physical activities does______ enjoy participating in?
19. If _____could change one thing to make life at recess/ gym class better, what do you think that would be?

Appendix C

Participant Interview Questions

1. If you had to go to school only three days a week, what are some of the things that you would like to do with the extra time?
2. Have you ever done anything that other people were surprised you could do?
3. What are some of the best things about being your age? What are some of the hardest things?
4. If you could pick one thing that you wouldn't have to worry about anymore, what would it be?...What would be the next thing?
5. Tell me about a typical day at recess.
6. Now tell me about a typical day during gym class.
7. Some kids really like sports a lot. Would you say that you do?
8. Which sports or activities are you good at?
9. What would you like to be really good at doing?
10. Are there certain kids that are good at all sports or games? Why do you think that is?
11. Are there certain kids who have a hard time at all games and sports? Why do you think that is?
12. What are some of your favorite things about gym class/recess?
13. What do you think is the biggest difference between gym class and recess?
14. Which do you like better, gym class or recess? Why?
15. If you could change some things about gym class/recess, what would they be?

Appendix D

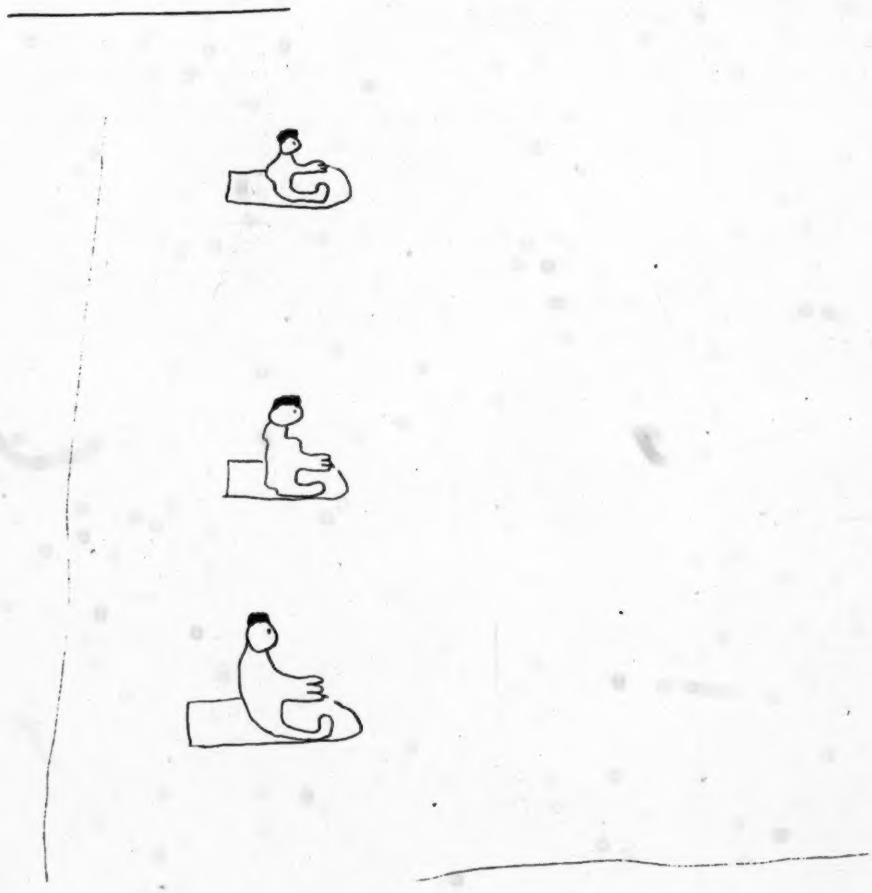
Questions About Drawings

1. Tell me about your drawing?
2. What is going on in this picture?
3. What title would you give this drawing?
4. I wonder what that person is thinking when he looks at the other children?
5. Are you in this picture?
6. How do the people in this picture feel?
7. How do you think the people in this picture feel about one another?
8. Looking at this picture now, is there anything you would change or add to it?

Appendix E

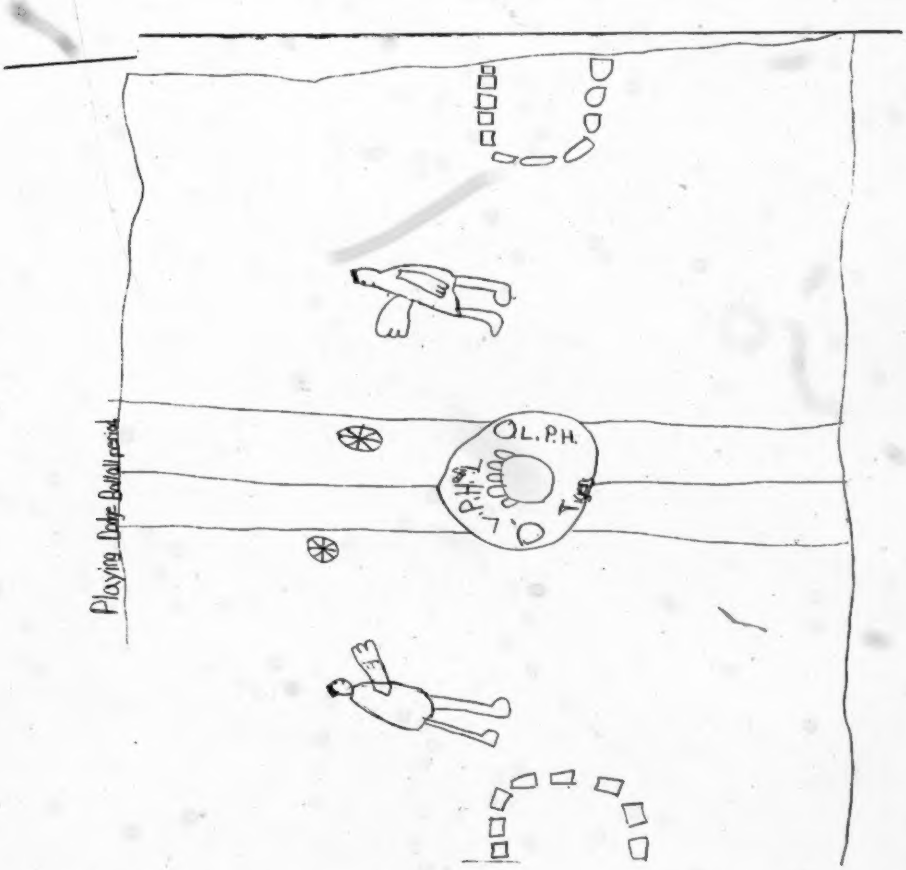
Wade's Good Day At Recess

Going down the hill all recess.



Appendix F

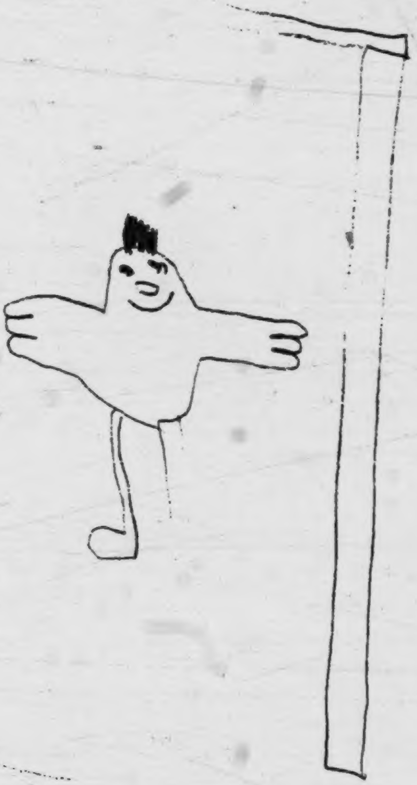
Wade's Good Day In Physical Education


Playing Dodge Ball all period
L.P.H.
L.P.H.

Appendix G

Wade's Bad Day In Physical Education

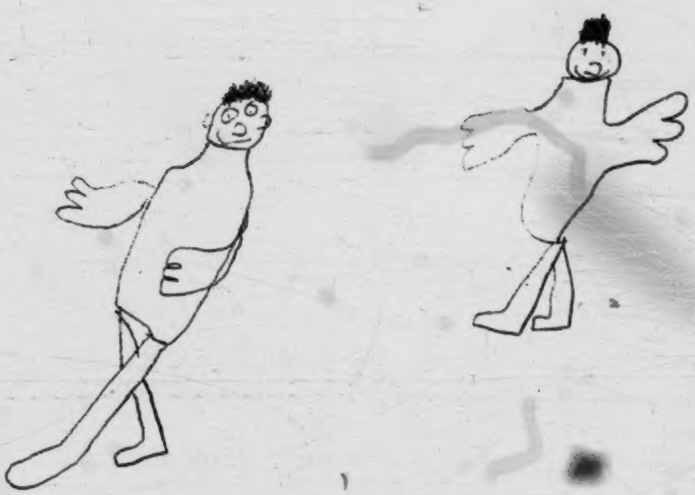
Jymnastics all period



Appendix H

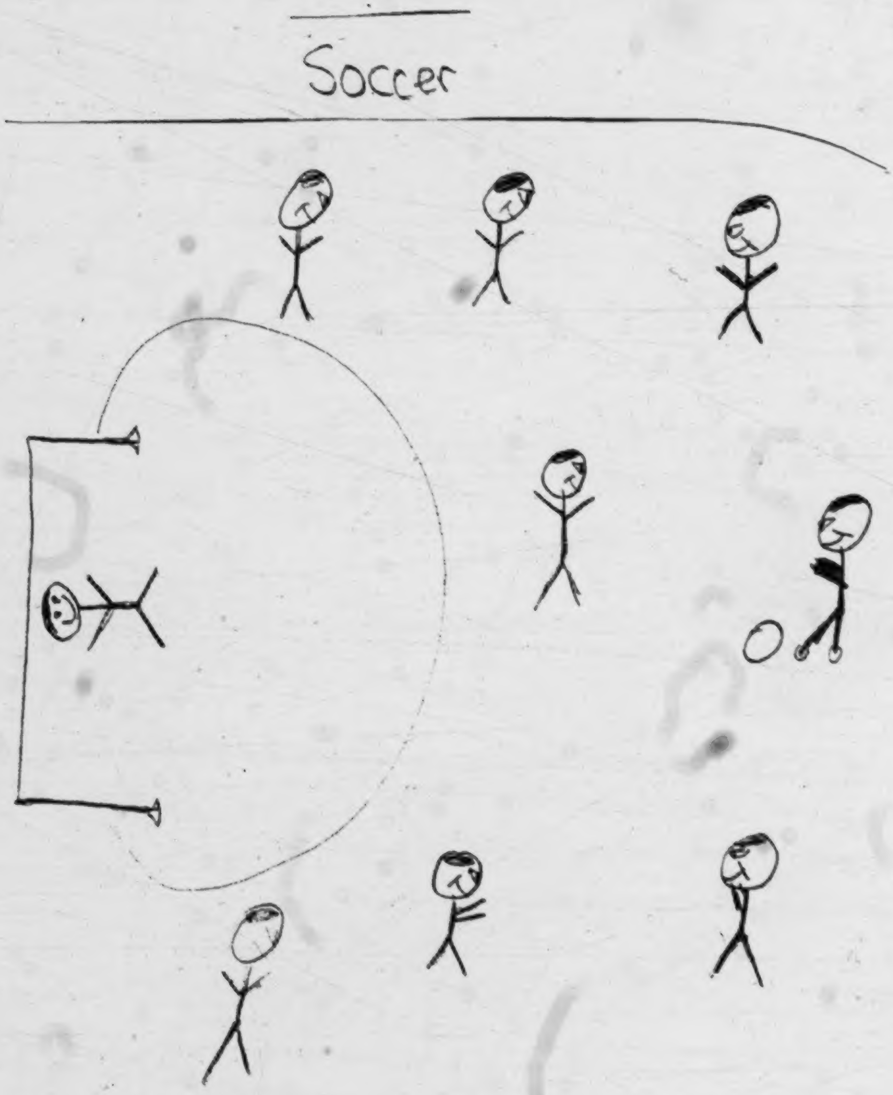
Wade's Bad Day At Recess

Playing tag all recess



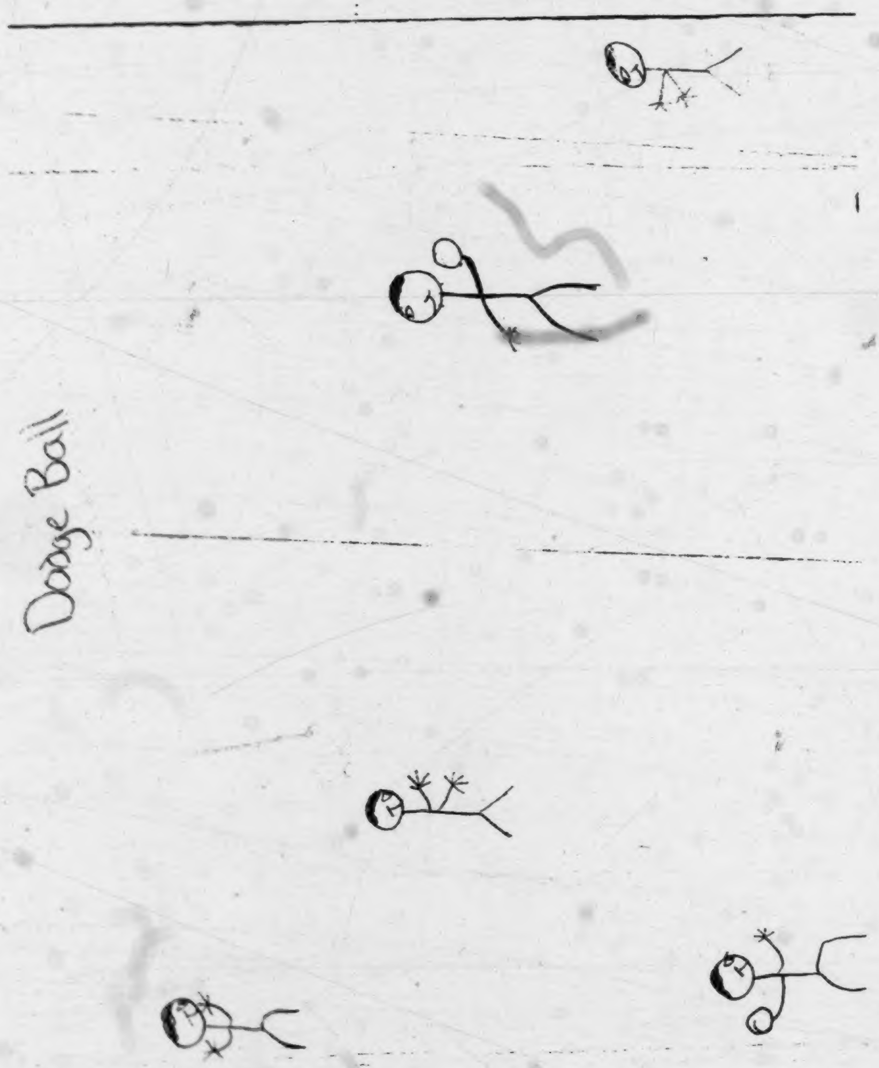
Appendix I

Eric's Good Day At Recess



Appendix J

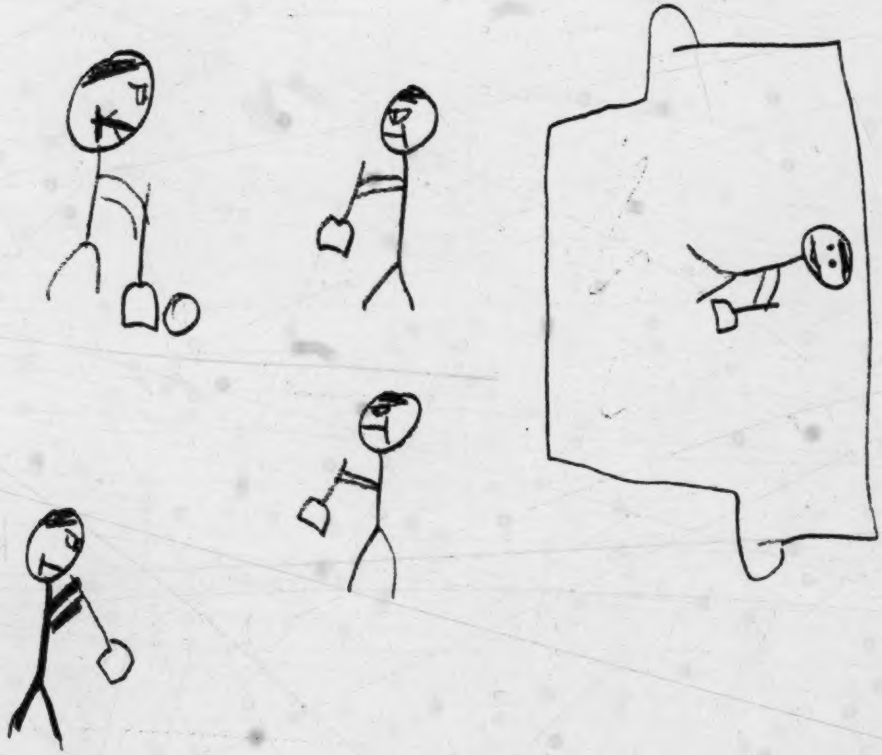
Eric's Good Day In Physical Education



Appendix K

Eric's Bad Day In Physical Education

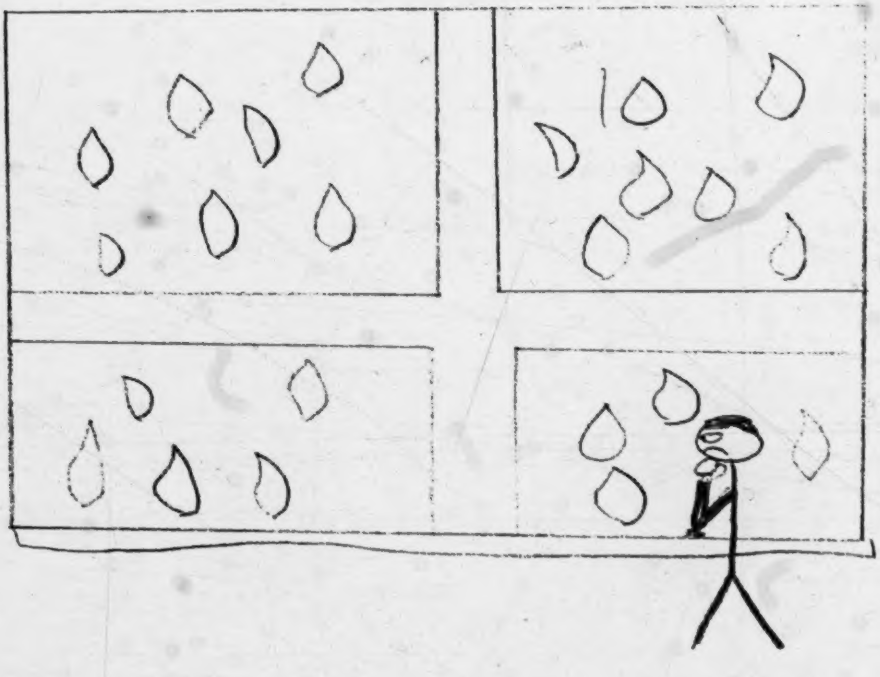
Broomball



Appendix L

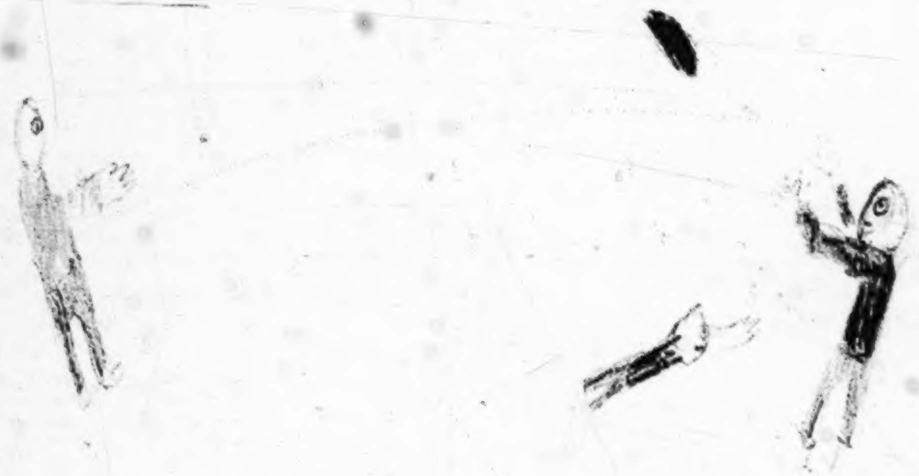
Eric's Bad Day At Recess

Rainy Day



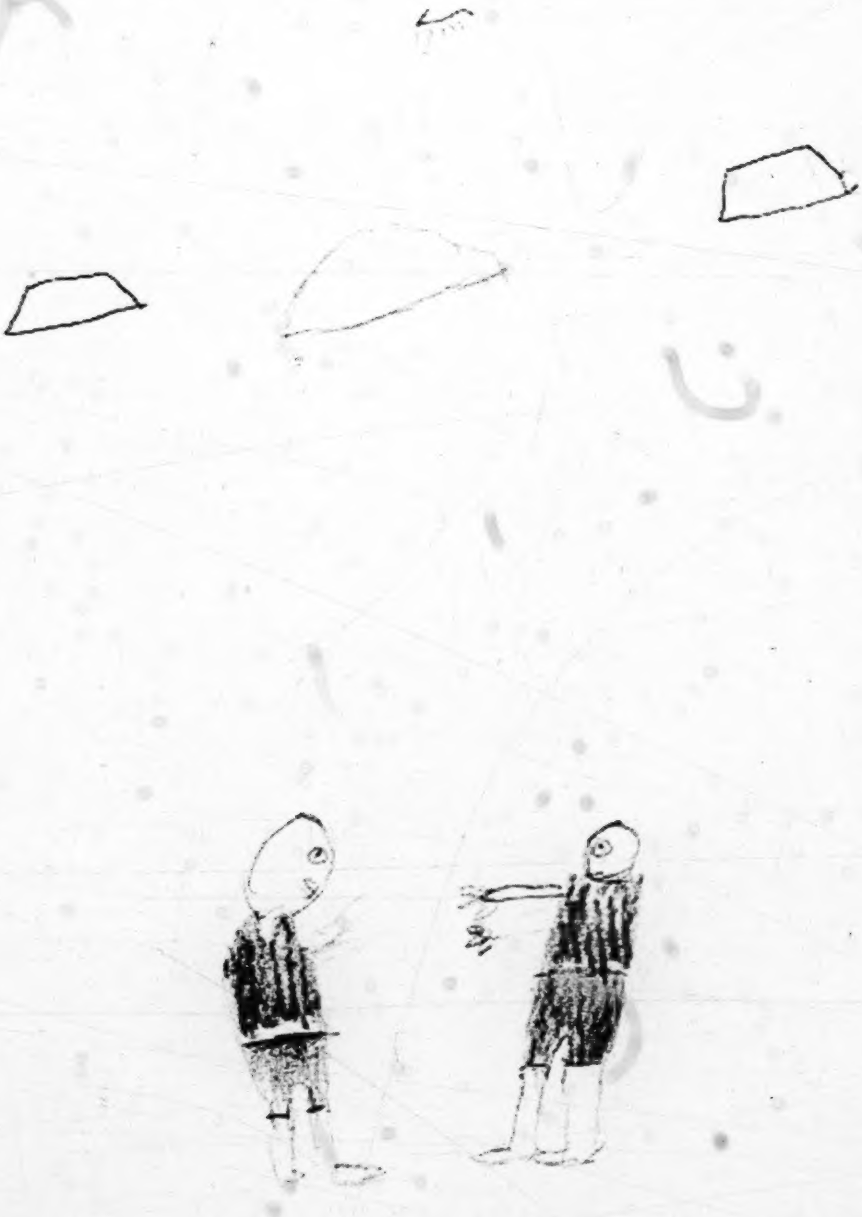
Appendix M

Craig's Good Day At Recess



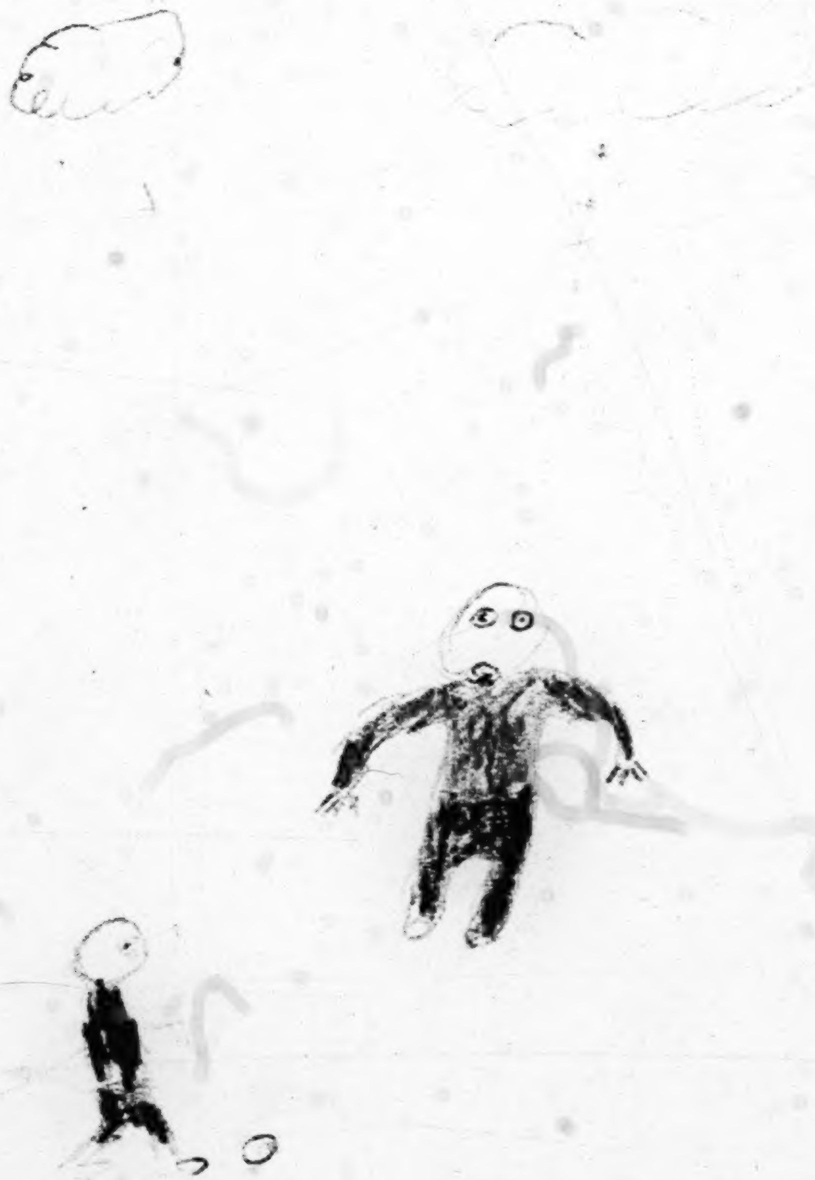
Appendix N

Craig's Good Day In Physical Education



Appendix O

Craig's Bad Day In Physical Education

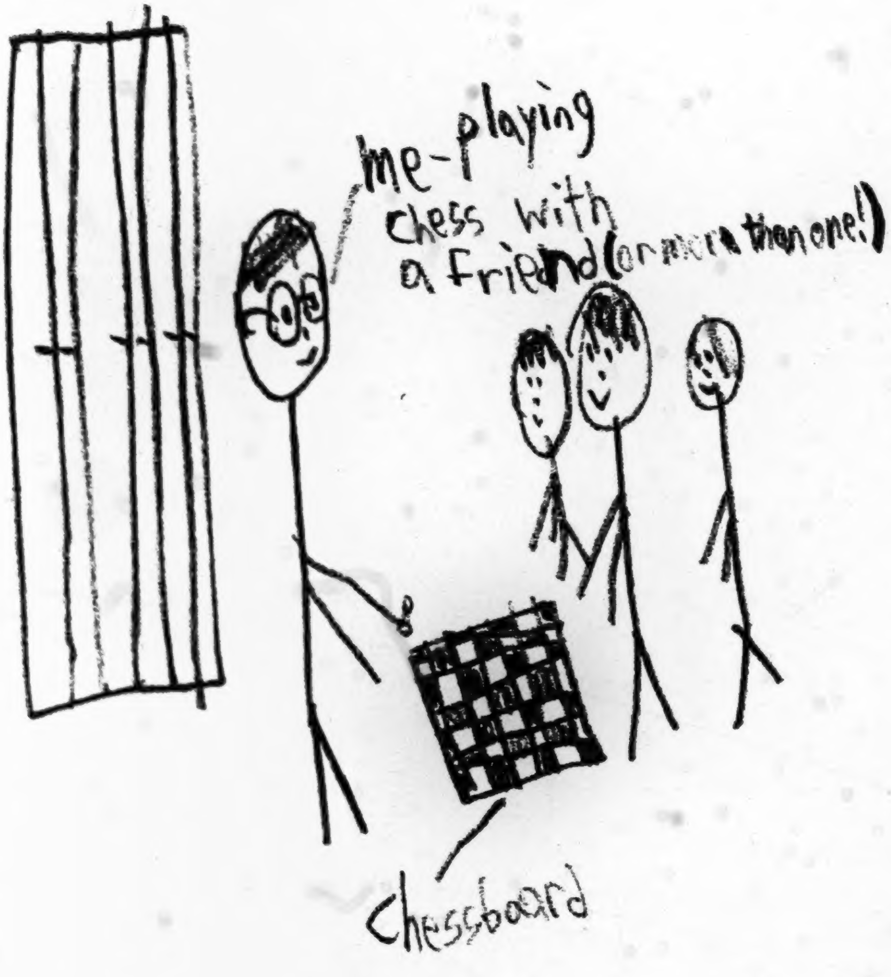


Appendix P

Craig's Bad Day At Recess

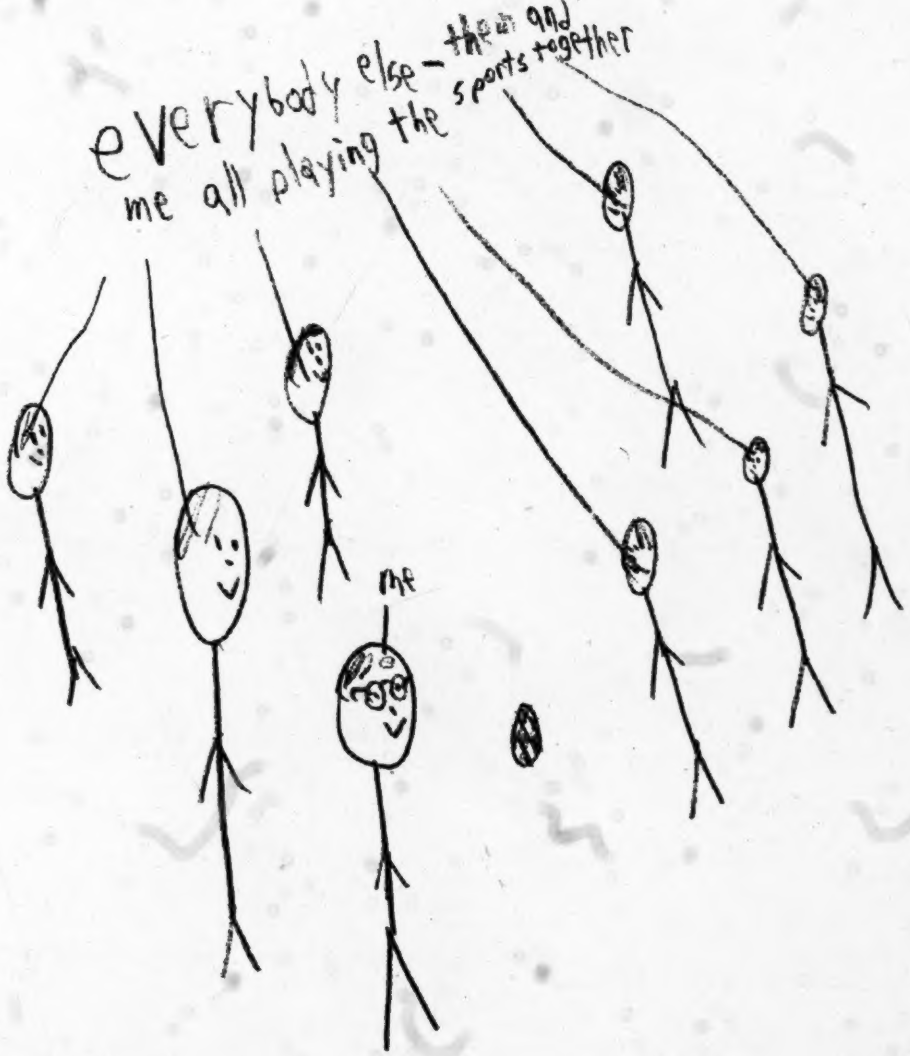
Appendix Q

Grant's Good Day At Recess


me-playing chess with a friend (or more than one!)
Chessboard

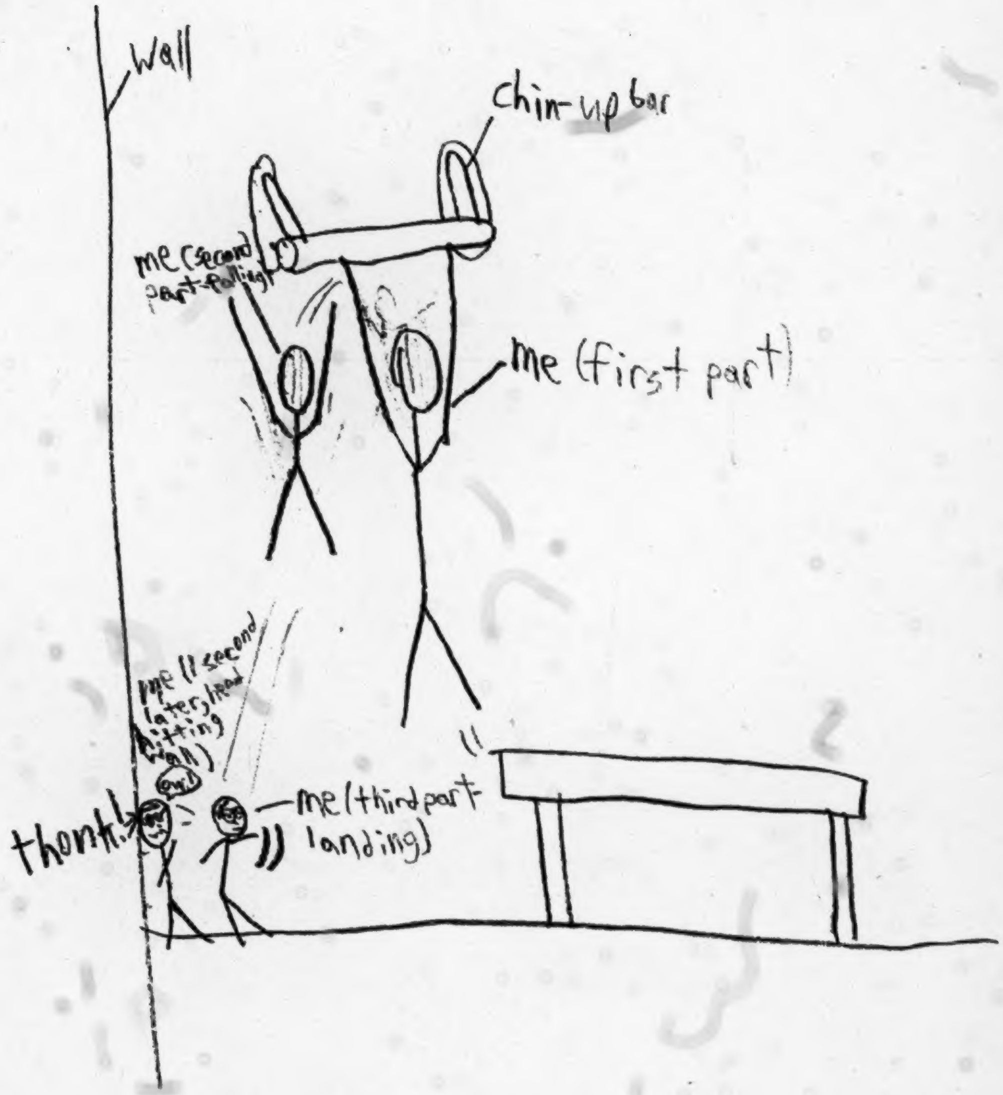
Appendix R

Grant's Good Day In Physical Education


everybody else - them and me all playing the sports together
me

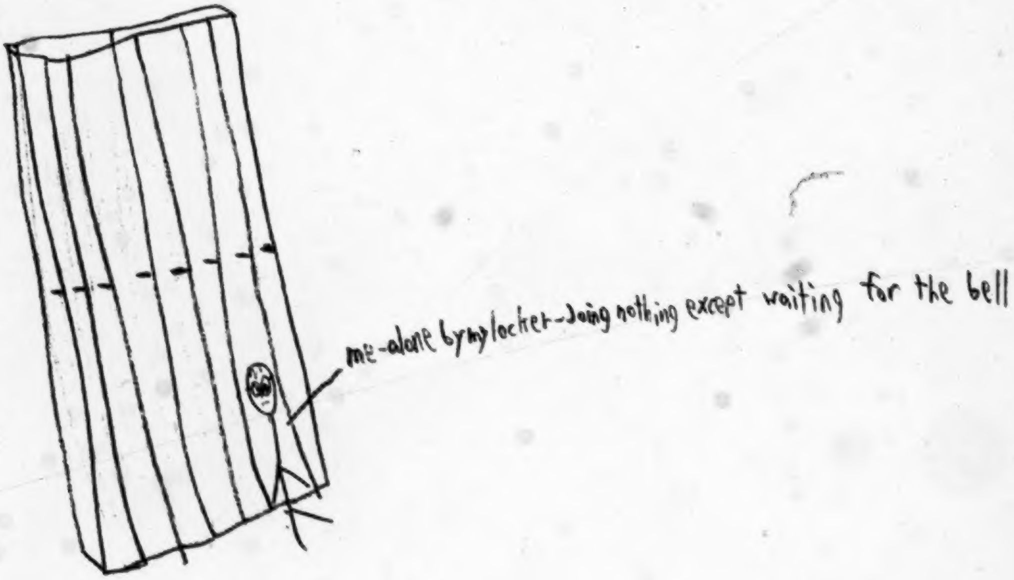
Appendix S

Grant's Bad Day In Physical Education


wall
chin-up bar
me (second part-falling)
me (first part)
me (1 second later, head hitting wall)
ow!
thonk!
me (third part-landing)

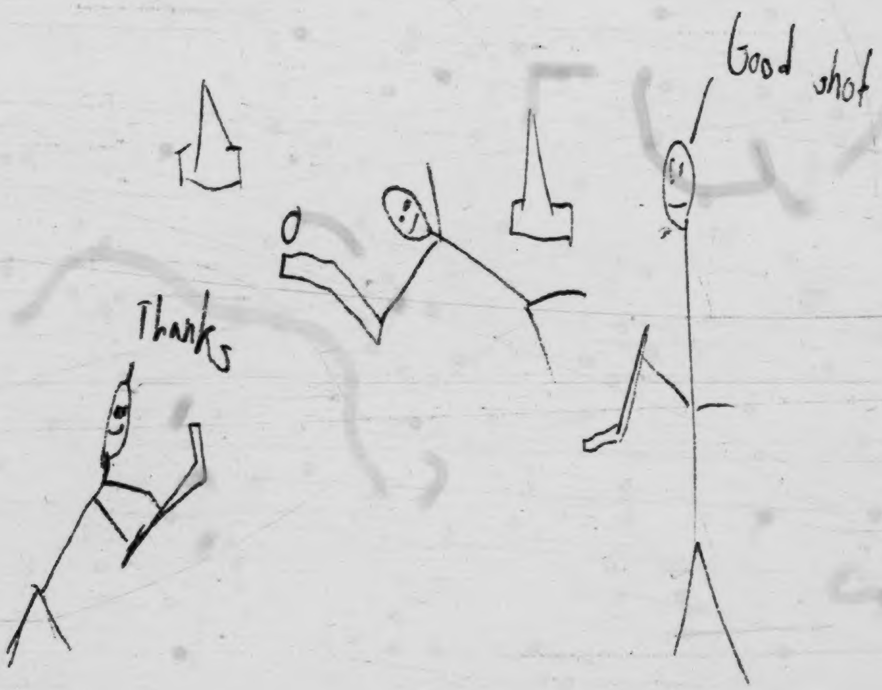
Appendix T

Grant's Bad Day At Recess


me-alone by my locker--Doing nothing except waiting for the bell

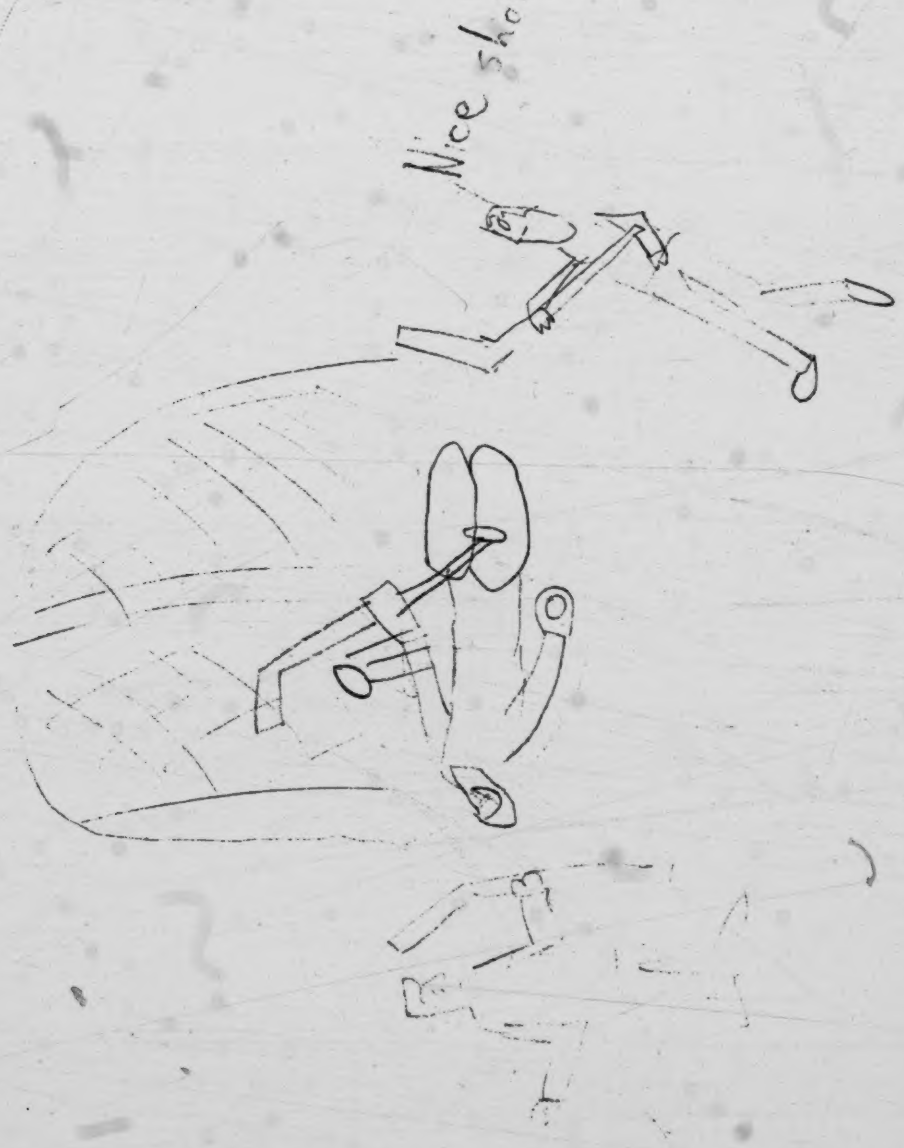
Appendix U

Mark's Good Day At Recess


Good shot
Thanks

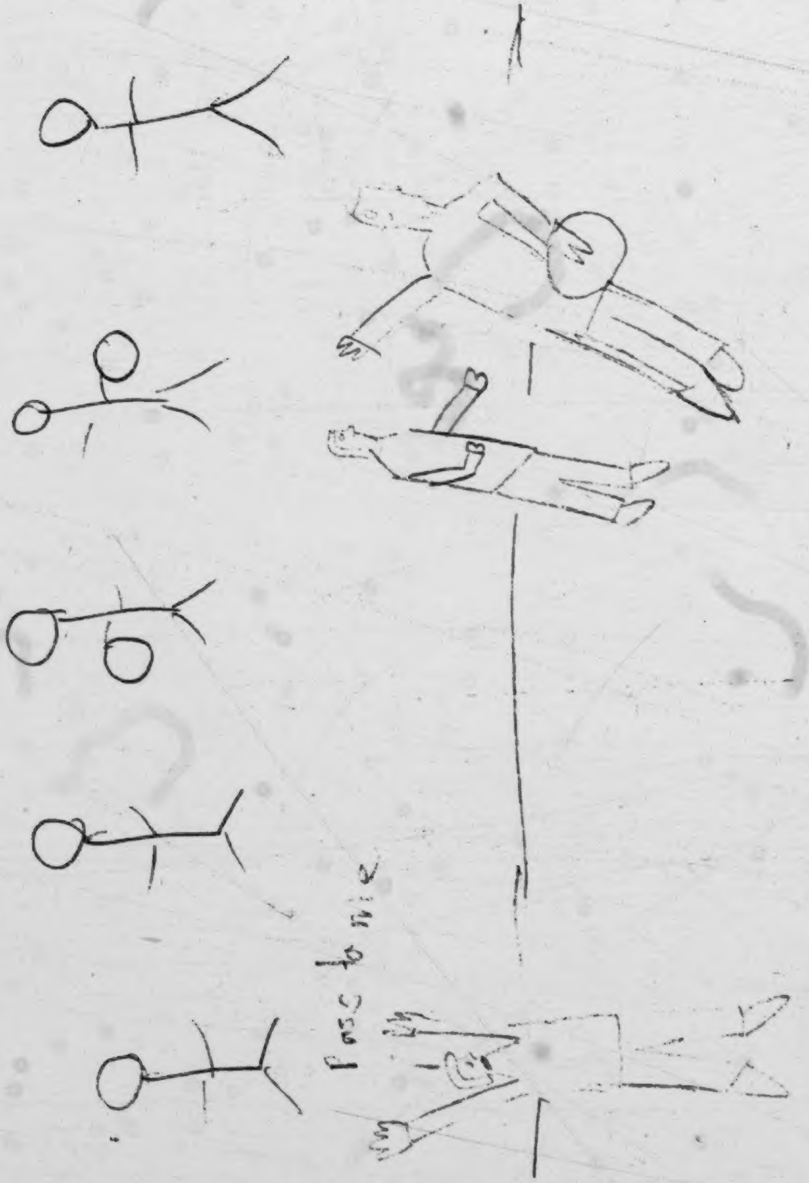
Appendix V

Mark's Good Day In Physical Education



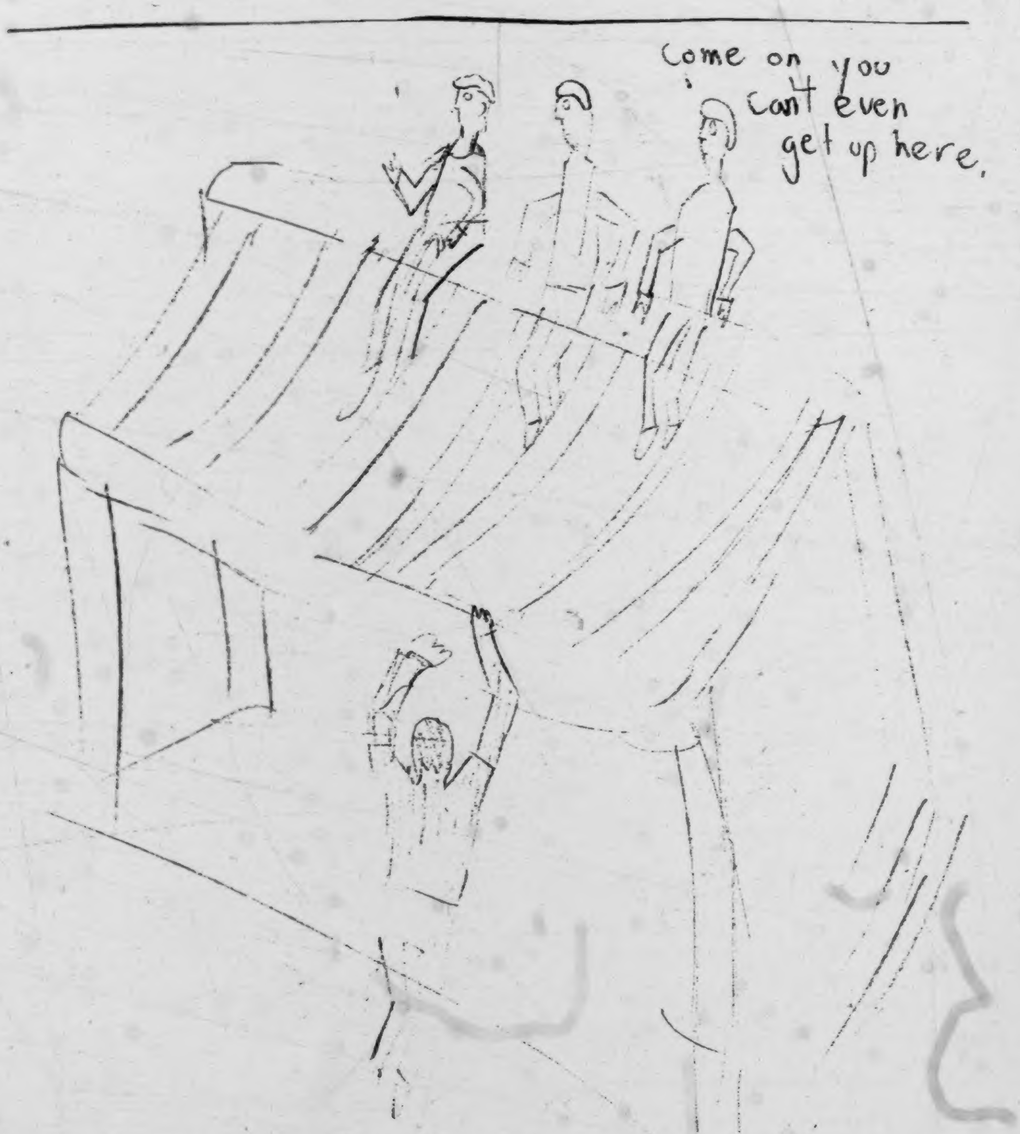
Appendix W

Mark's Bad Day In Physical Education



Appendix X

Mark's Bad Day At Recess


Come on you can't even get up here.